American Fuel & Petrochemical Manufacturers

AFPM

We Make Progress

2019 Annual Report



AFPM

For the first time ever, more than half the world's population is middle class or wealthier. Their need for transportation fuels and the products made from petrochemicals is on the rise, and our members are answering the call.

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Cover photo: Bottom inside view of a stack pipe in an oil refinery. ©Shutterstock

A Message from the Chairman of the Board and the President and CEO of AFPM

The American Fuel & Petrochemical Manufacturers (AFPM) is proud to represent the refining and petrochemical companies that make the products that power the global economy. Our members are expanding their reach, producing the fuels and products that propel commerce and improve lives across the globe.

For the first time ever, more than half the world's population is middle class or wealthier. Their need for transportation fuels and the many products made from petrochemicals is on the rise, and our members are answering the call. We make the gasoline, diesel, jet and marine fuels that power the cars, trucks, ships and planes that keep people and goods moving and advancing, and the energy that heats and cools millions of homes.

Our petrochemicals enable the products that supply the world with life-saving pharmaceuticals and medical equipment, plastics and storage containers that keep food fresh longer, and the materials integral to the cell phones and computers that connect the world.

As uses for our products expand, we're doing more with less. Our facilities are the most efficient in the world. We've invested billions of dollars to reduce the impact of our operations, resulting in lower emissions and cleaner fuels. We will continue growing to meet future demand in the most resourceful and environmentally sound ways possible.

When it comes to our investments in safety, we are proud to say that our industries continue to rank among the safest in the country, and the world. Looking ahead our focus will remain on continued safe operations and improving plant performance, along with utilizing advanced technology, to strive for operational excellence.

AFPM remains steadfast in its commitment to advocate for and educate consumers and policymakers about our industries, our people, and our products. Together, we will continue to innovate and deliver solutions to the world, today and for generations to come.





Joseph W. Gorder
Chairman of the Board

Valero Energy
Corporation

Chet M. Thompson
President and CEO

American
Fuel & Petrochemical
Manufacturers

Making The Products That Power Progress

25 million children →  → 

46 million Americans →  → 

Ask the question "What do U.S. fuel and petrochemical manufacturers make possible?" — and for 25 million children, the answer is the diesel fuel that powers their school buses. For 46 million Americans, the answer is the jet fuel that brings families together for the holidays, that makes Disneyland or New York City a summer vacation, and that allows a high school graduate from Sarasota attend college in Seattle.

Petrochemicals like ethylene, propylene, butadiene and xylene make possible medical exoskeleton technology that enables paraplegics to walk again, and strong, lightweight plastics that make today's cars more efficient. They're also a big part of the packaging that keeps your food fresh, the robotic tractors and drones used in modern agriculture, and bringing food from the farm to your table. And they're integral to our everyday lives, used to make everything from clothes, carpets and furniture; to tablets, PCs and phones; to aspirin, bandages and shampoo. These are just a few of the thousands of products that are made from petrochemicals.

Providing Access to Clean Water

Among other technology breakthroughs, advances in petrochemicals are creating a new, cost-effective way to help alleviate growing challenges to accessing potable water.

Although the earth is nearly 70 percent water, only 2.5 percent is fresh water, and less than one percent is available for drinking and irrigation. The World Health Organization has estimated that over two billion people around the world today don't have access to safe drinking water.

But scientists are developing a process that removes salts and minerals from ocean water, making it potable. This futuristic science involves the use of metal-organic frameworks — little known, next-generation materials — that wouldn't be possible without petrochemicals.

Metal-organic frameworks are porous, consist of sponge-like crystals, and are highly unique. They contain the largest internal surface areas of any known substance (if unfolded, just one gram of the material could theoretically be thinly spread across an entire football field). Researchers have discovered that these permeable membranes can mimic the filtering function of organic cell membranes. As a result, they allow water molecules to pass through while capturing and storing chemical compounds — particularly, the salt and ions in saline water. Not only is this process more energy efficient than traditional desalination techniques, but it is also more cost-effective.

Thanks to petrochemicals and some of the world's greatest minds, these membranes have the potential to bring clean water to more people.

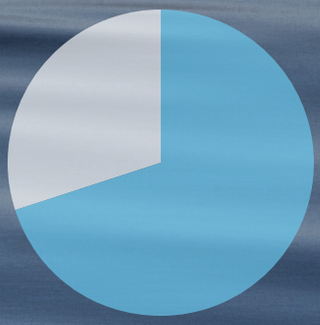


Looking into the future, fuels and petrochemicals will continue to be invaluable in our lives. As we pursue innovations that could dramatically extend the human lifespan, significantly improve transportation, keep food fresh for much longer, and even make skies cleaner, one thing is clear:

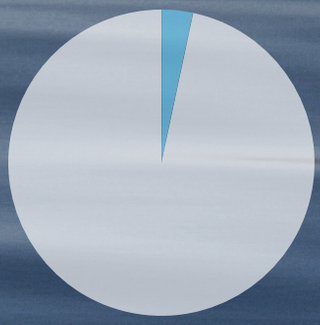
If you can imagine it, chances are America's fuels and petrochemicals will be part of it.

Advances in petrochemicals are creating a new, cost-effective way to help alleviate growing challenges to accessing potable water.

Earth is nearly 70% water



Only 2.5% is fresh water



> 1% is available for drinking and irrigation

Keeping The World Moving

U.S. refineries have risen to the challenge of meeting the world's growing demand for petroleum products today and will continue to fill this vital role well into the future. We are uniquely able to do this because our refiners run the most efficient and technologically advanced operations in the world.

The members of the American Fuel & Petrochemical Manufacturers own and operate 110 refineries, which accounts for 94 percent of all U.S. refining. In 2018, U.S. refining capacity totaled 18.6 million barrels per day, and U.S. refinery utilization rates averaged 93 percent, the highest level in more than a decade.[1]

75%

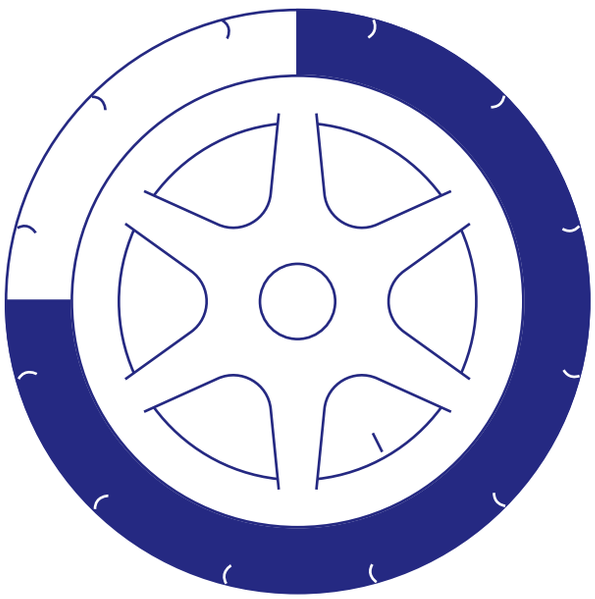
New vehicle sales in 2050 are expected to be internal combustion engine (ICE) vehicles.[2]

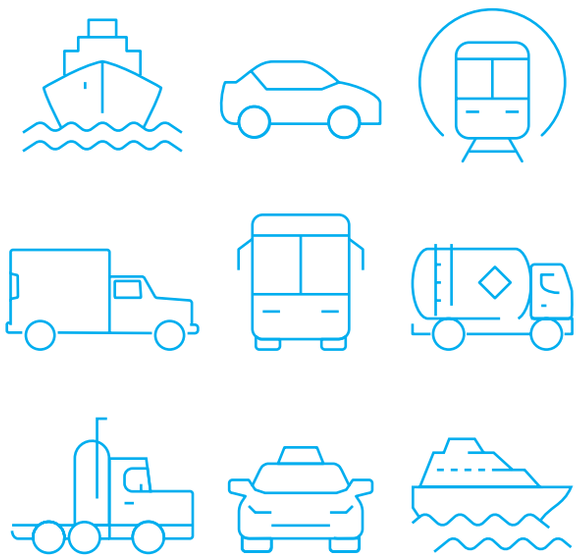


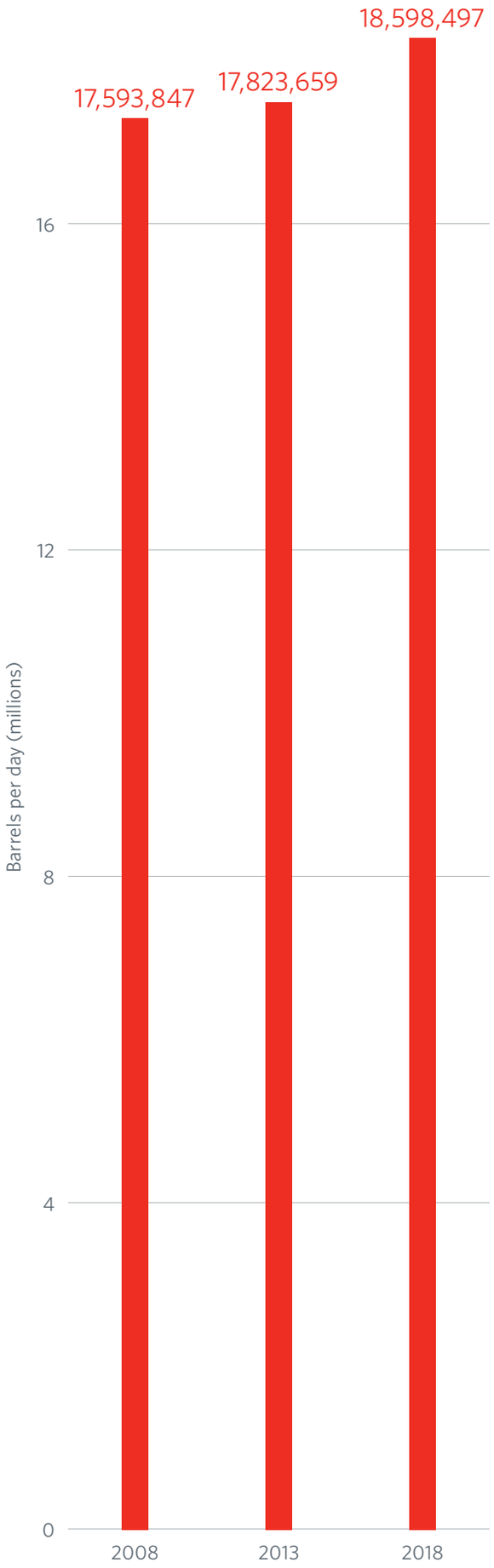
90%

In 2018, petroleum products accounted for about 90 percent of the total U.S. transportation sector energy use and are projected to continue supplying about 90 percent through mid-century.[3]

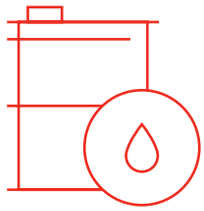


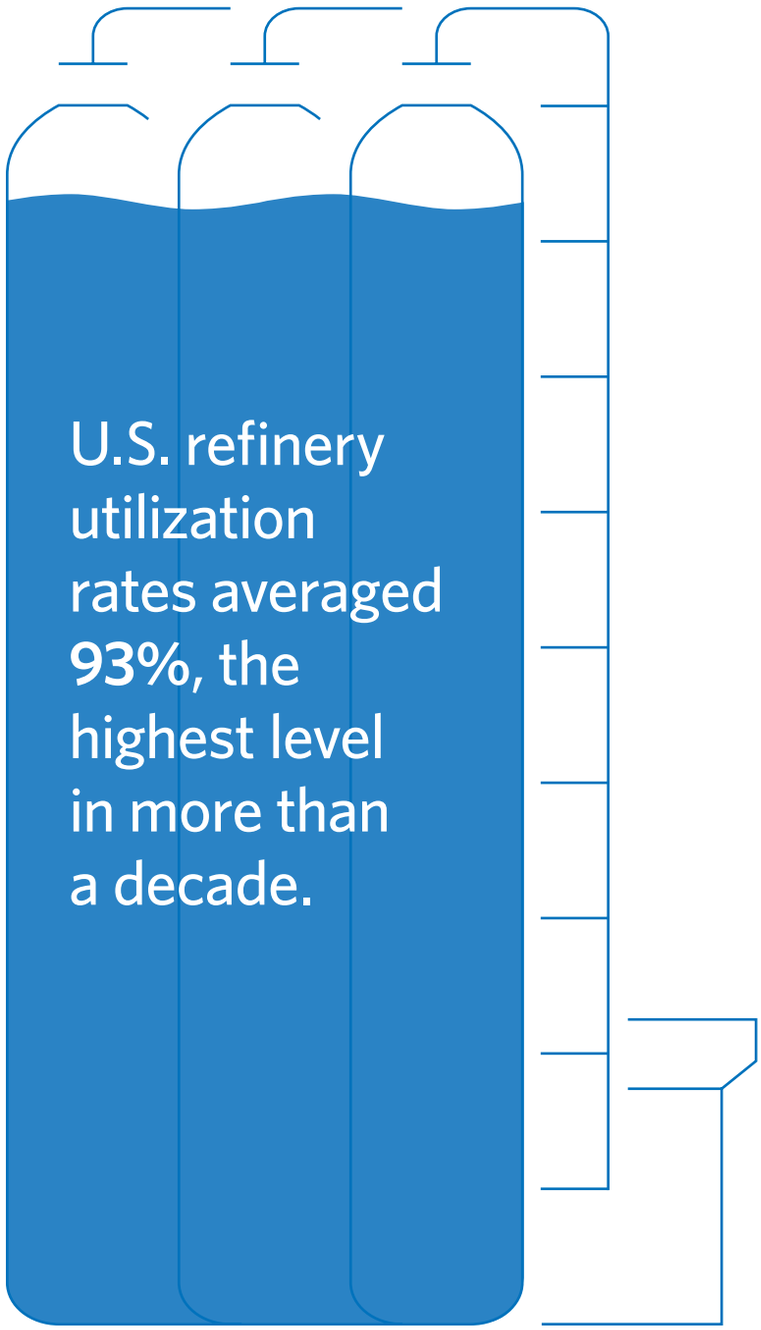






In 2018, U.S. refining capacity totaled 18.6 million barrels per day[4]





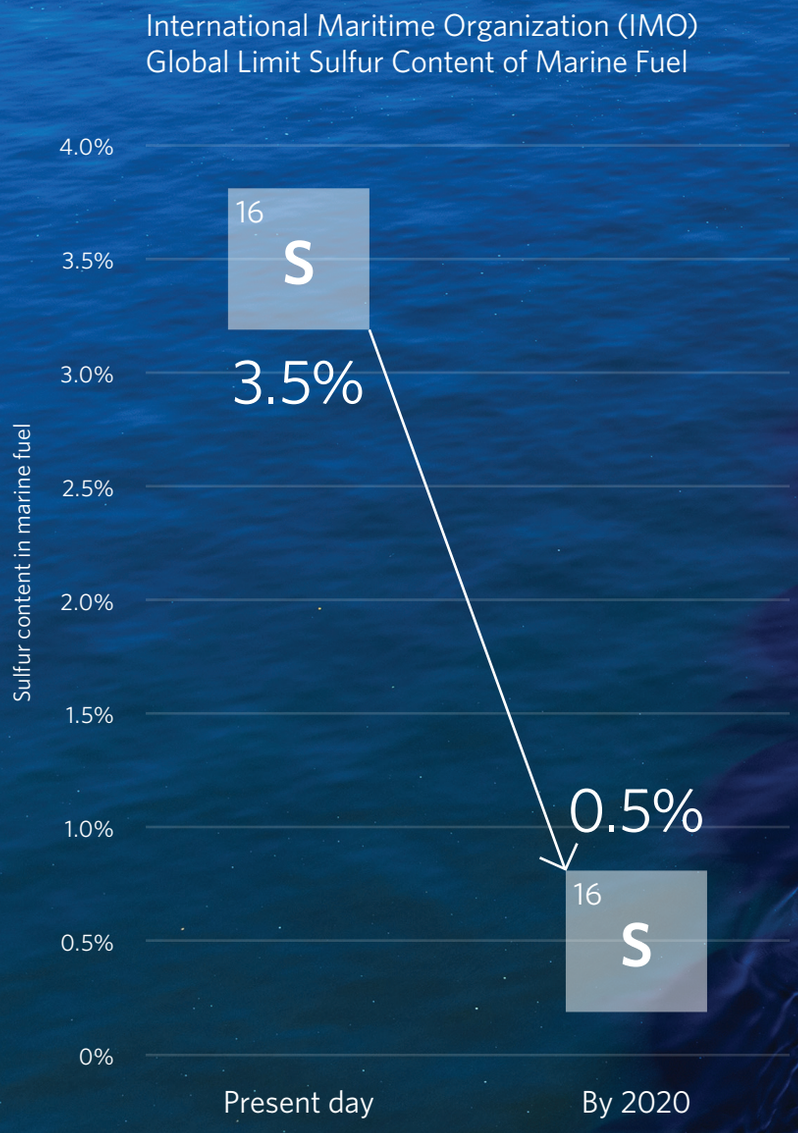
U.S. refinery utilization rates averaged **93%**, the highest level in more than a decade.

Leading in Clean Fuel Development

Between 1970 and 2016, investments in cleaner fuels have helped reduce U.S. air pollution by 73 percent, even as total miles driven have nearly tripled. Over the last decade, the U.S. refining industry has invested more than $100 billion to produce cleaner fuels that allow drivers to get more out of their vehicles and reduce emissions throughout the global economy.

These investments have prepared American refiners for January 1, 2020, when the International Maritime Organization (IMO) will lower the allowable sulfur content of marine fuel from 3.5 percent to 0.5 percent. This will have a significant environmental benefit by reducing emissions from the global shipping sector.

As the home to the most complex refinery system in the world, the U.S. energy industry is prepared and well positioned to supply the market with feedstock and fuel, making global commerce cleaner, while contributing to the U.S. economy.

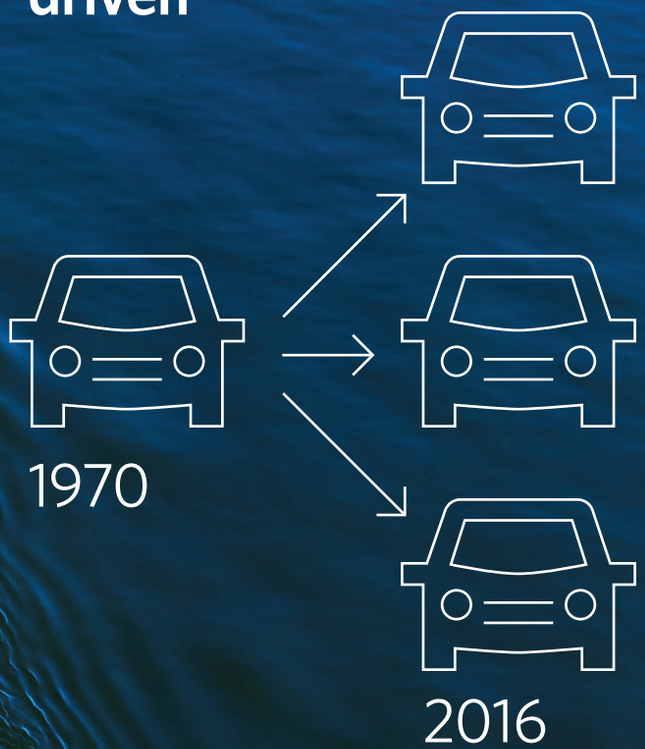


Between 1970 and 2016, investments in cleaner fuels have helped reduce U.S. air pollution, even as total miles driven nearly tripled.[5]



1970 → 2016

73% reduction in air pollution and nearly 3x miles driven[6]

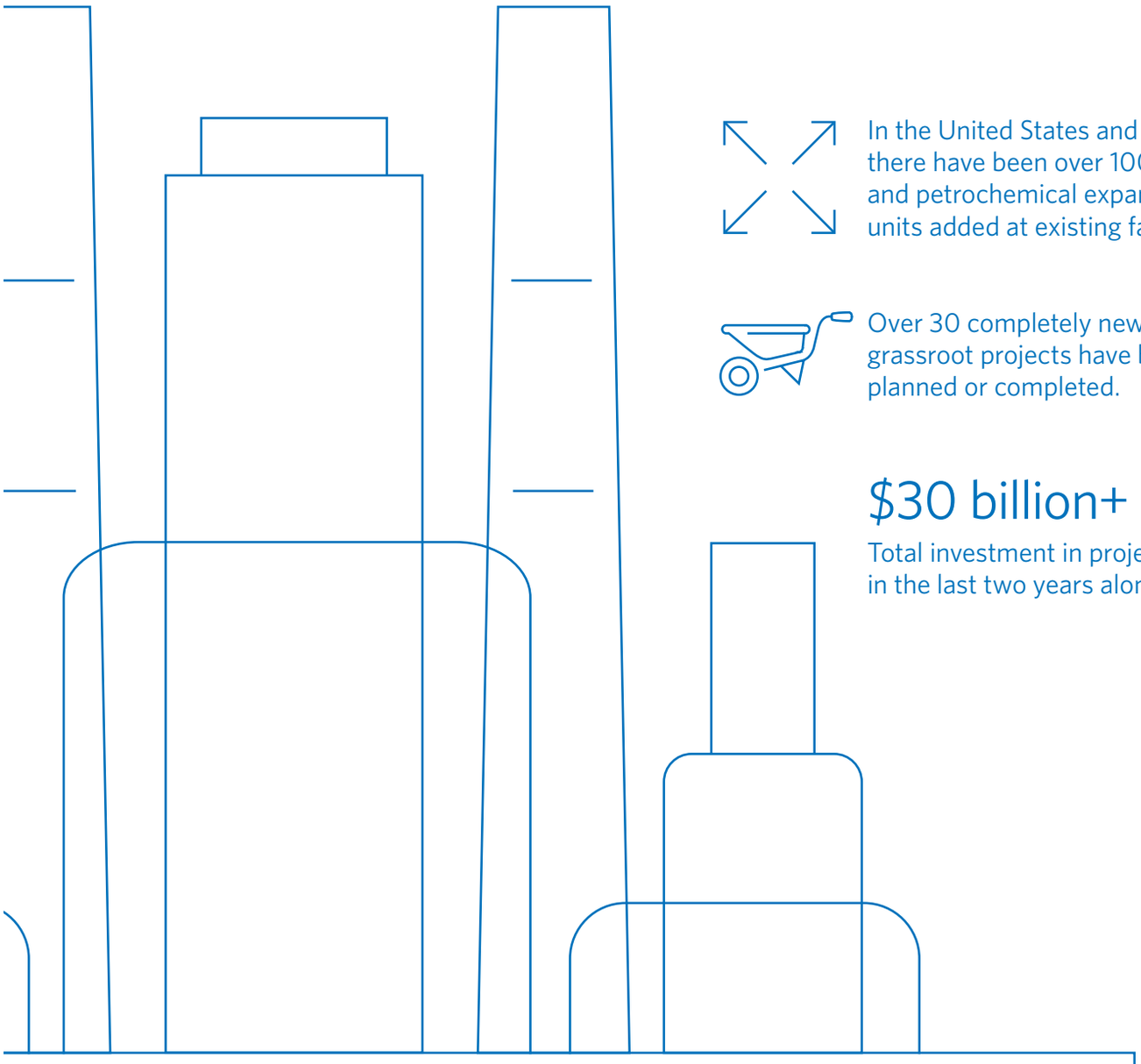


Investing in the U.S. Petrochemical Industry

As the living standards of millions of people around the world improve, so does the demand for products made possible by petrochemicals. The U.S. petrochemical industry, which includes the 229 facilities owned and operated by AFPM members, is investing to meet the world's growing needs.

The industry is undergoing a wave of expansion, the likes of which haven't been seen in fifty years.

During that same time, the U.S. petrochemical industry has invested nearly $15 billion resulting in a combined capacity of almost 17 billion pounds of ethylene, the most-produced and in-demand petrochemical building block. In 2019, an additional $4 billion in total investment is expected to come online.[7] This increase in capacity will help to bring affordable, modern-day products to people around the world.

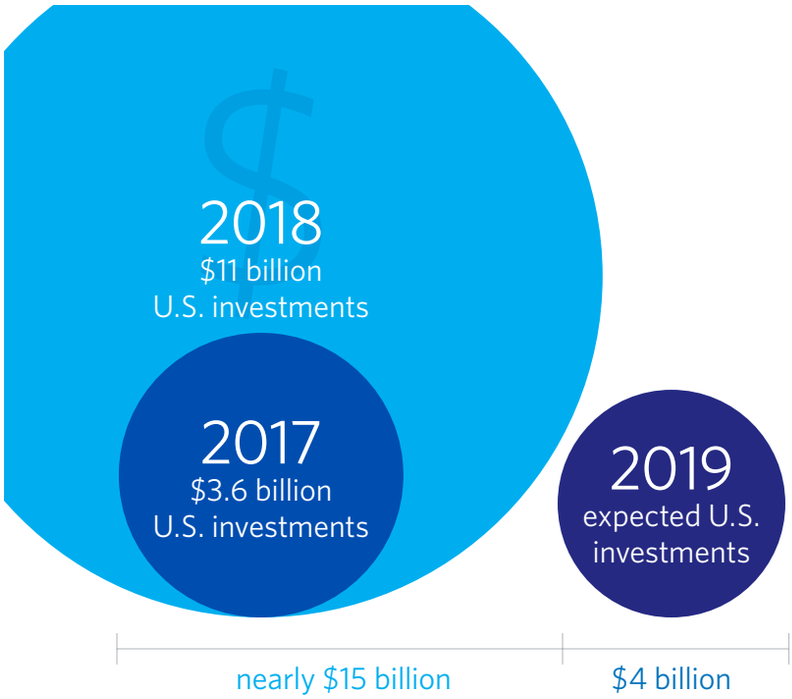


In the United States and Canada there have been over 100 chemical and petrochemical expansions and units added at existing facilities.[8]

Over 30 completely new grassroot projects have been planned or completed.

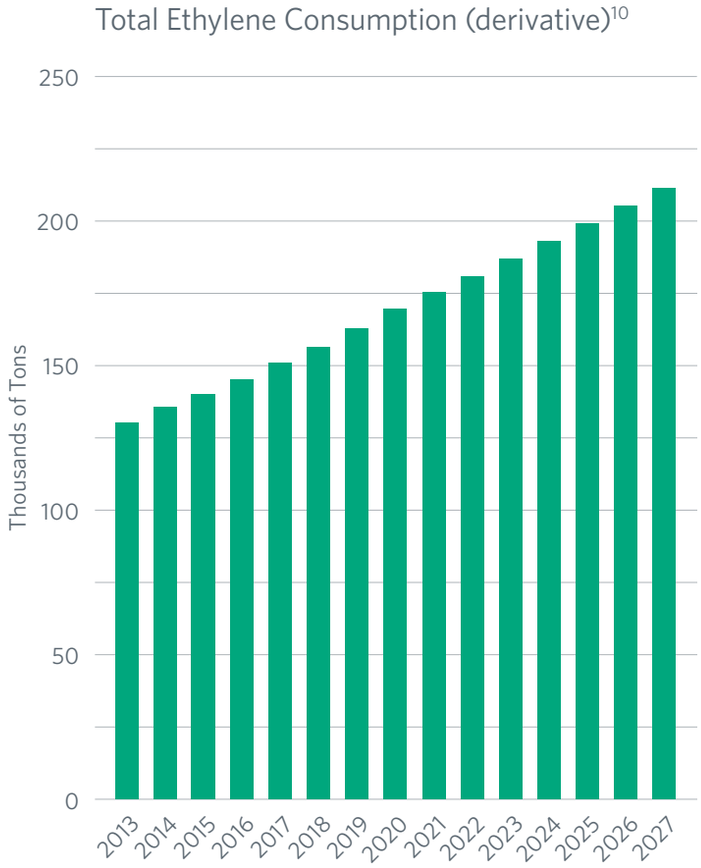
$30 billion+

Total investment in projects in the last two years alone.



resulting in a combined capacity of almost

17 billion pounds of ethylene[9]



In Petrochemical Industry, A Second Wave of Growth

A decade ago, when Mike Zamora ran ExxonMobil's Baytown petrochemical plant, his vision to expand the facility and boost its capacity was nothing but a pipe dream. "There was really just very little business incentive at the time because we weren't competitive within the global landscape," Zamora said in an interview.

Now, Zamora, head of manufacturing for ExxonMobil Chemical Company in the Americas, is a key player in a petrochemical boom of historic proportions. Zamora oversees a significant part of ExxonMobil's plans to invest $20 billion along the Gulf Coast over 10 years through a series of projects that includes the company's first petrochemical plant to be proposed on a completely undeveloped site in four decades. Those plans also include a new cracker, completed in July 2018, on the very site he worked at in Baytown that is the first by ExxonMobil to be built from scratch in 20 years.

Zamora's dream became a reality thanks to a plentiful U.S. supply of cheap natural gas and gas liquids, combined with increasing demand for chemical products from emerging markets overseas, particularly in Asia. Petrochemical facilities are capitalizing on the opportunity, tapping natural gas liquids reserves to supply ethane, which through the cracking process, is converted into ethylene, a key building block of plastic.

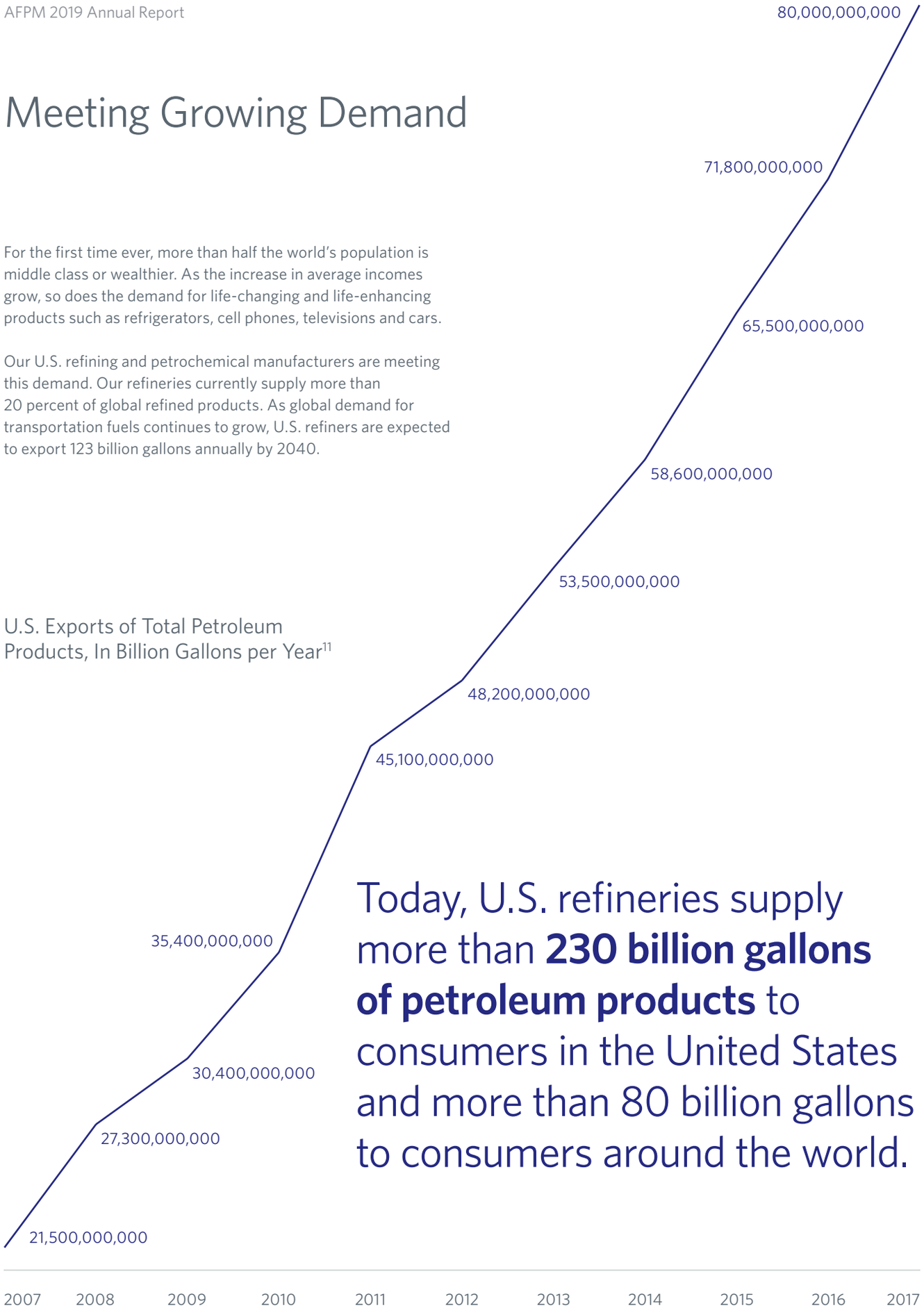
"It's just such an awesome change in our industry. It's not just a first wave and a second wave, but it's shown itself to be a sustainable wave of growth."
– *Mike Zamora, ExxonMobil*

Meeting Growing Demand

For the first time ever, more than half the world's population is middle class or wealthier. As the increase in average incomes grow, so does the demand for life-changing and life-enhancing products such as refrigerators, cell phones, televisions and cars.

Our U.S. refining and petrochemical manufacturers are meeting this demand. Our refineries currently supply more than 20 percent of global refined products. As global demand for transportation fuels continues to grow, U.S. refiners are expected to export 123 billion gallons annually by 2040.

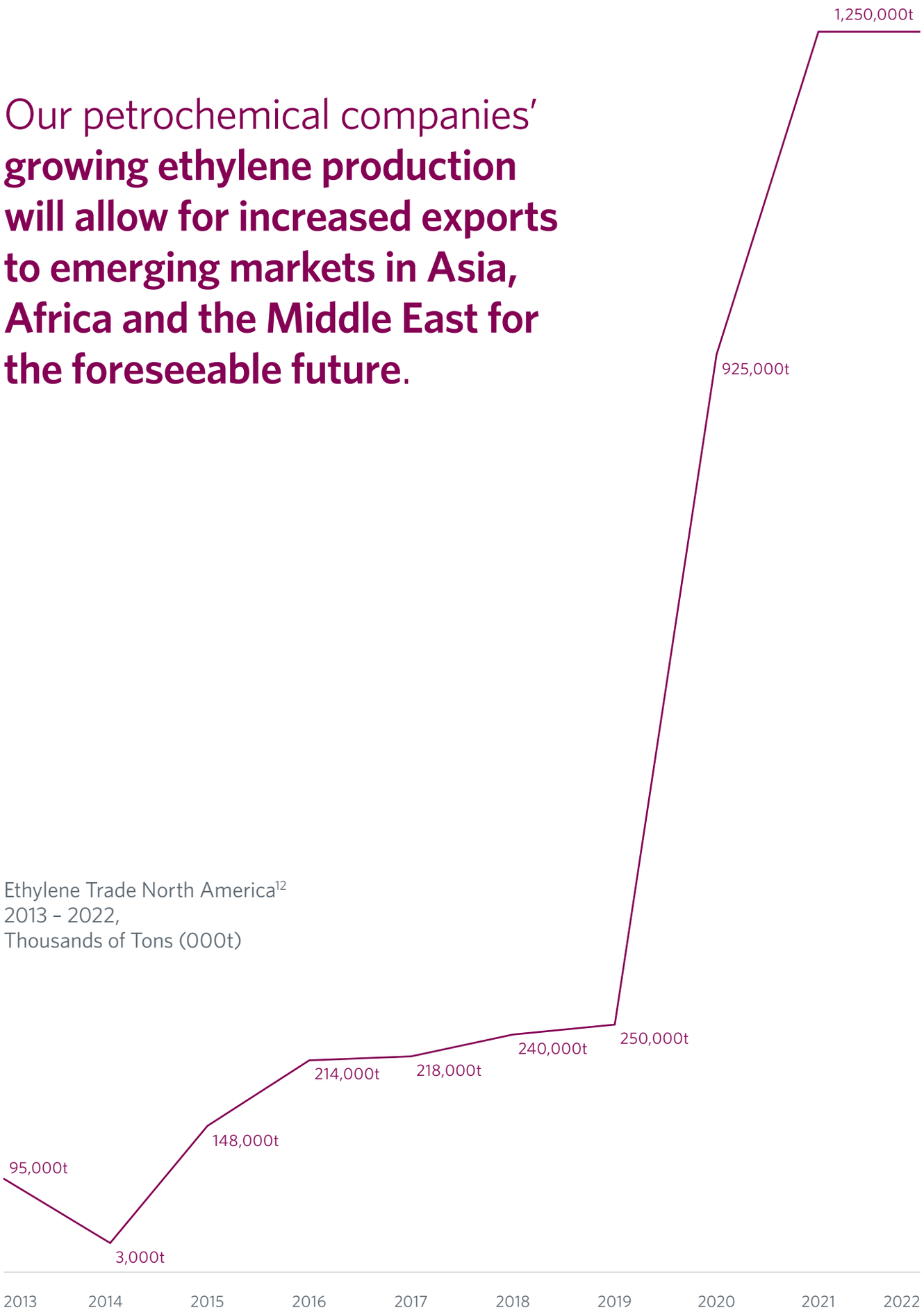
U.S. Exports of Total Petroleum Products, In Billion Gallons per Year[11]



Today, U.S. refineries supply more than **230 billion gallons of petroleum products** to consumers in the United States and more than 80 billion gallons to consumers around the world.

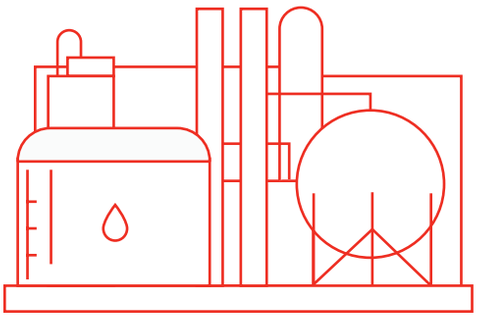
Our petrochemical companies' **growing ethylene production will allow for increased exports to emerging markets in Asia, Africa and the Middle East for the foreseeable future.**

Ethylene Trade North America[12]
2013 – 2022,
Thousands of Tons (000t)

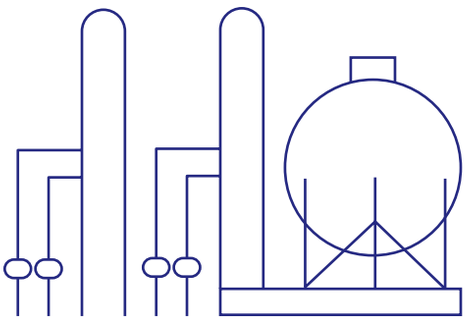


Refineries and Petrochemical Facilities

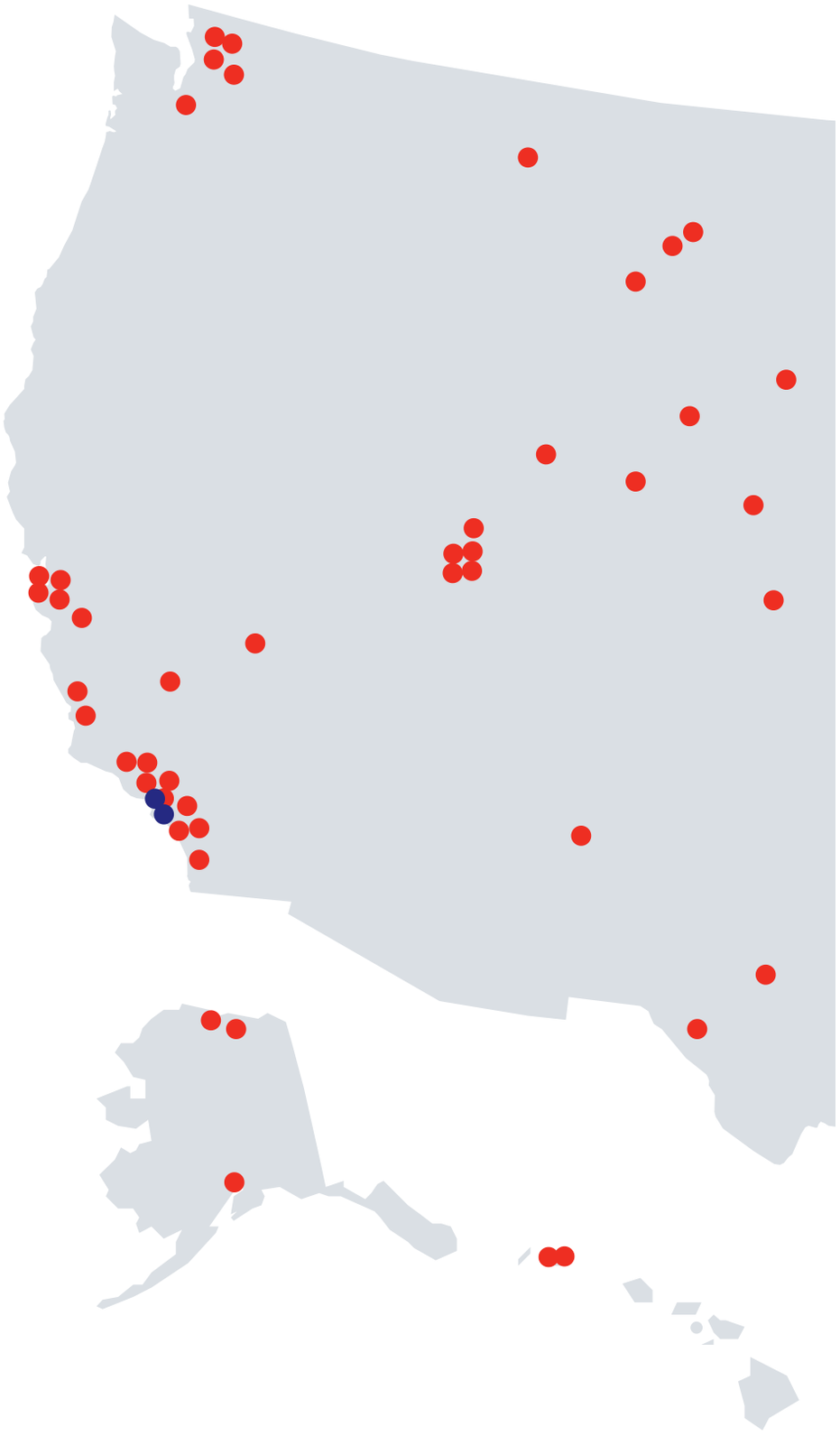
AFPM members own and operate:

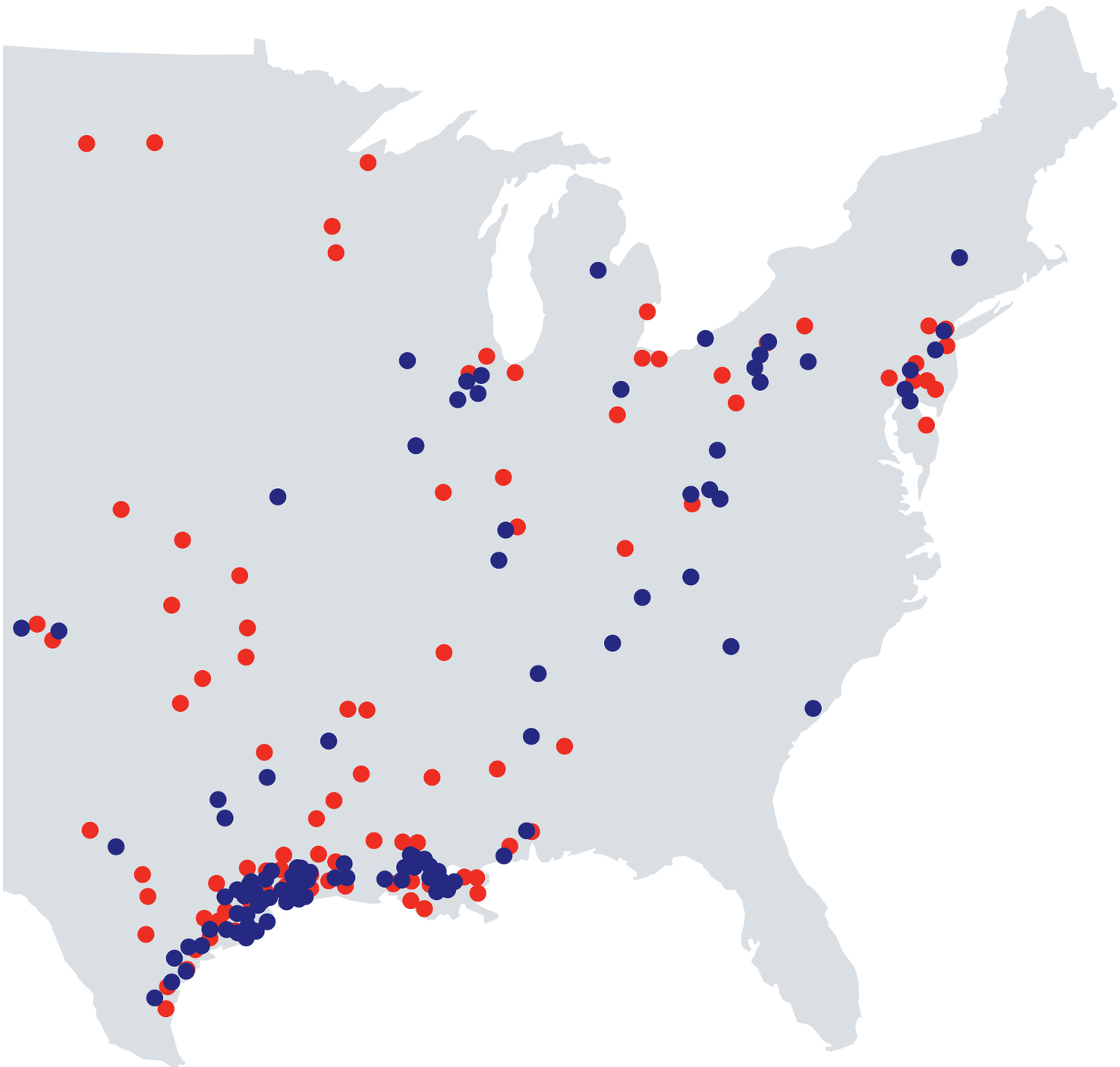


110
refineries



229
petrochemical facilities





Improving Environmental Performance

U.S. refiners and petrochemical manufacturers have invested billions of dollars in new equipment, innovation and engineering to be increasingly efficient and cleaner than ever.

These investments have brought about lower emissions and greater operating capacity. From 2011 to 2017, refining production increased an impressive 10.5 percent,[13] while total reported greenhouse gas emissions (GHG) in the refining sector remained relatively consistent.

Amid rising ethylene production and several new ethylene facilities coming online, reported greenhouse gas emissions for petrochemical production remained consistent over the same time period.[14]

Our members are constantly innovating and seeking new ways to reduce emissions, including investing in carbon capture and storage projects, and new technologies to reduce flaring emissions and incidents.

These efforts have paid off significantly. Our industries have cut the six most common emissions by nearly 70 percent and ozone levels have decreased more than 30 percent since 1990. Since then, the U.S. gross domestic product is up nearly 200 percent, our population has grown by 30 percent, vehicle miles traveled are up 40 percent and energy consumption rose more than 15 percent. As of 2016, we have reduced sulfur levels in gasoline by 97 percent.[15] We have preserved and protected land and water resources through effective waste management programs and by adhering to federal guidelines that govern effluent discharge, hazardous waste disposal and other priority areas.



Since 1990[16]

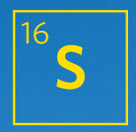












↑ 200% U.S. gross domestic product

↑ 30% Population

↑ 40% Vehicle miles traveled

↑ 15% Energy consumption

↓ 73% Emissions reductions

↓ 97% Sulfur levels in gasoline



Pioneering New Technology and Investing Millions to Reduce Emissions

Flaring is integral to refinery safety. Used to burn excess gas that can otherwise build up in pipes and towers of a facility, flaring keeps gas from venting directly into the atmosphere when a facility shuts down, loses power or has a different technical issue.

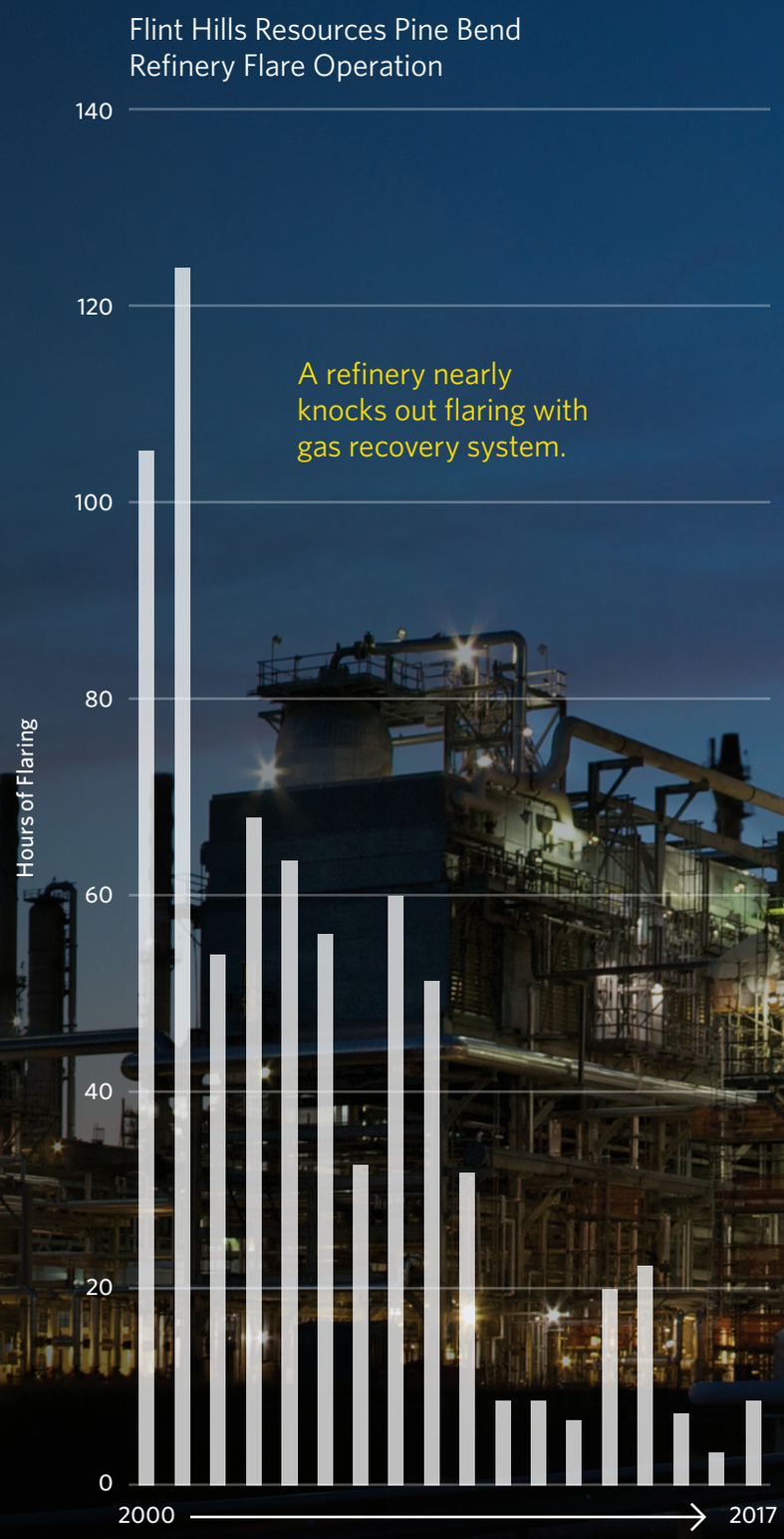
Through investments in new technologies, many refiners have greatly reduced their use of flares and emissions in recent years.

Take the flame at the top of a 400-foot stack at the Flint Hills Resources' Pine Bend refinery, for example. This flame used to burn so brightly and so consistently that some say it was used to train pilots to land planes at the Minneapolis-St. Paul Airport.

Nowadays, pilots would be out of luck — the flame at Pine Bend is mostly dormant. The flare is used so infrequently — as little as four hours a year — that the refinery now warns neighbors when operators do need to use it, to ensure the public isn't unnecessarily alarmed.

Marathon Petroleum Corporation (MPC) became one of the first refiners to test the flare gas recovery system — a combustion efficiency system. After installing this technology on each of its 31 refinery flares at a cost of $375 million, the results have been staggering. From 2007 to 2016, MPC has reduced the amount of hazardous air pollutants released by flares by 85 percent and has cut greenhouse gases from flaring systems by more than half.

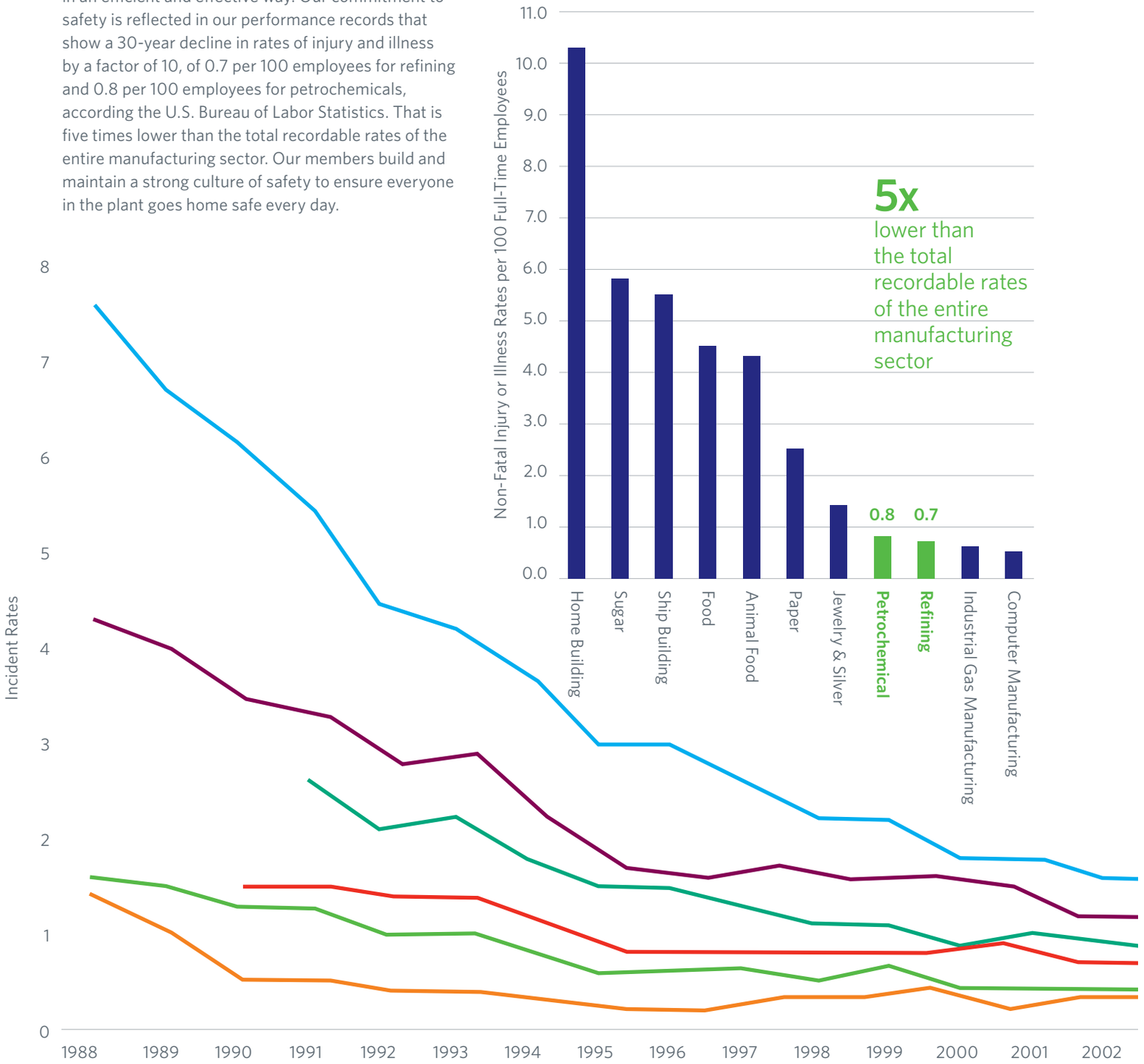
The eagerness of refiners to adopt new technologies that reduce emissions from flaring has been highly successful during the last decade, and we can look forward to their continued ingenuity to improve our shared environment.




"Our efforts to minimize flaring together with other improvements we made in our environmental performance has helped us earn back public trust and confidence in our operations."
–*Jake Reint*
Flint Hills Resources

Promoting Safety Throughout the Industry

Safety is a core value of fuel and petrochemical manufacturers who work together to enhance safety in an efficient and effective way. Our commitment to safety is reflected in our performance records that show a 30-year decline in rates of injury and illness by a factor of 10, of 0.7 per 100 employees for refining and 0.8 per 100 employees for petrochemicals, according the U.S. Bureau of Labor Statistics. That is five times lower than the total recordable rates of the entire manufacturing sector. Our members build and maintain a strong culture of safety to ensure everyone in the plant goes home safe every day.



Incidence Rates of Non-Fatal Injuries or Illnesses Among Manufacturing Sector[17]

5x lower than the total recordable rates of the entire manufacturing sector

U.S. refiners and petrochemical manufacturers take a collaborative approach to safety, working together to progress towards the goal of zero incidents.

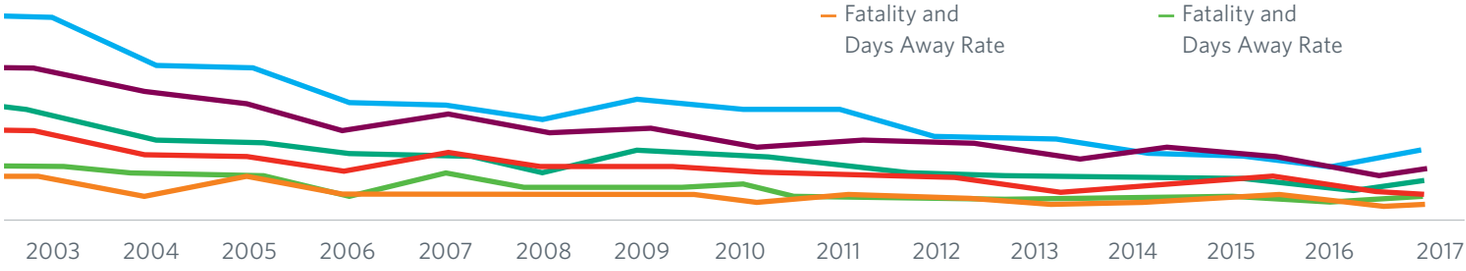
To further this goal, AFPM offers Occupational and Process Safety Programs enabling members to share practices and learn from each other to continuously improve safety at their facilities. Recently, AFPM expanded these programs to include an immersive learning working group, utilizing emerging technologies such as virtual reality and augmented reality to improve hazard identification and procedure execution in controlled, safe environments.

We are also collecting information that will be shared across industry to improve safety at facilities. The Incident Classification Data Collection records and analyzes member companies' actual, high potential and near-miss incident data with the goal of identifying and targeting opportunities for industry-wide improvement.

Refining and Petrochemical Tier 1 Process Safety Event Rates[18]



Refining and Petrochemical Industries Have Reduced Their Injury & Illness Rates By a Factor of 10



Drones are Making Refineries and Petrochemical Plants Safer, More Efficient



A career with the U.S. Army took Russell Lewis all over this country and abroad. But whether he was an operations officer in Fort Drum, N.Y., or a battalion commander in Afghanistan, a particularly memorable adage was applicable for every job.

"There's one thing we'd say about a soldier," Lewis said. "If you can save me from danger, save me from danger."

Lewis has carried that philosophy over to his position as the Corporate, Western Regional Security Supervisor for Marathon Petroleum Corporation. From his office in San Antonio, Lewis plays an integral role in ensuring the safety of the company's employees. The need for "persistent surveillance" in this line of work isn't all that different from what Lewis was responsible for in the military.

While the potential for incidents at a refinery pales in comparison to danger on the battlefield, there are precarious positions an employee may face in fuel and petrochemical manufacturing. That's where drones come into play.

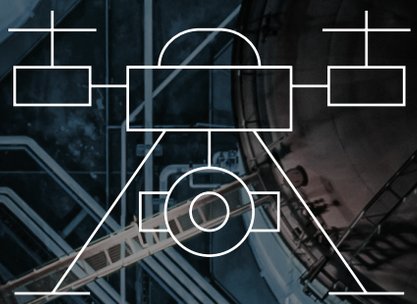
"Whether in the military or at refineries, using a drone means that's an officer or an employee I don't have to put out there," Lewis said.

At the Shell Deer Park Manufacturing complex in suburban Houston, the Drone Aerial Response Team (DART) monitors livestream video footage, enabling action within 15-20 minutes. In 2017, the first year of the program, the team logged 477 flights, with estimated cost savings of $1.2 million.

In the aftermath of Hurricane Harvey, two drone teams completed an entire site assessment in two weeks — an unprecedently quick amount of time compared to the old method which required employees to climb stairs and manually inspect each tank.

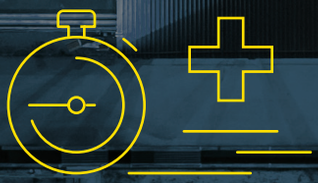
One drone would fly a mission and identify issues with pictures and video. That intel enabled engineers and maintenance workers to make repairs quickly, while the other drone scanned other areas for trouble.

"We're saving people from working at heights, saving rental costs, saving man hours and time on tools," said John McClain, DART's chief pilot.



"Whether in the military or at refineries, using a drone means that's an officer or an employee I don't have to put out there."

–*Russell Lewis*
Marathon Petroleum Corporation



$1.2 million saved



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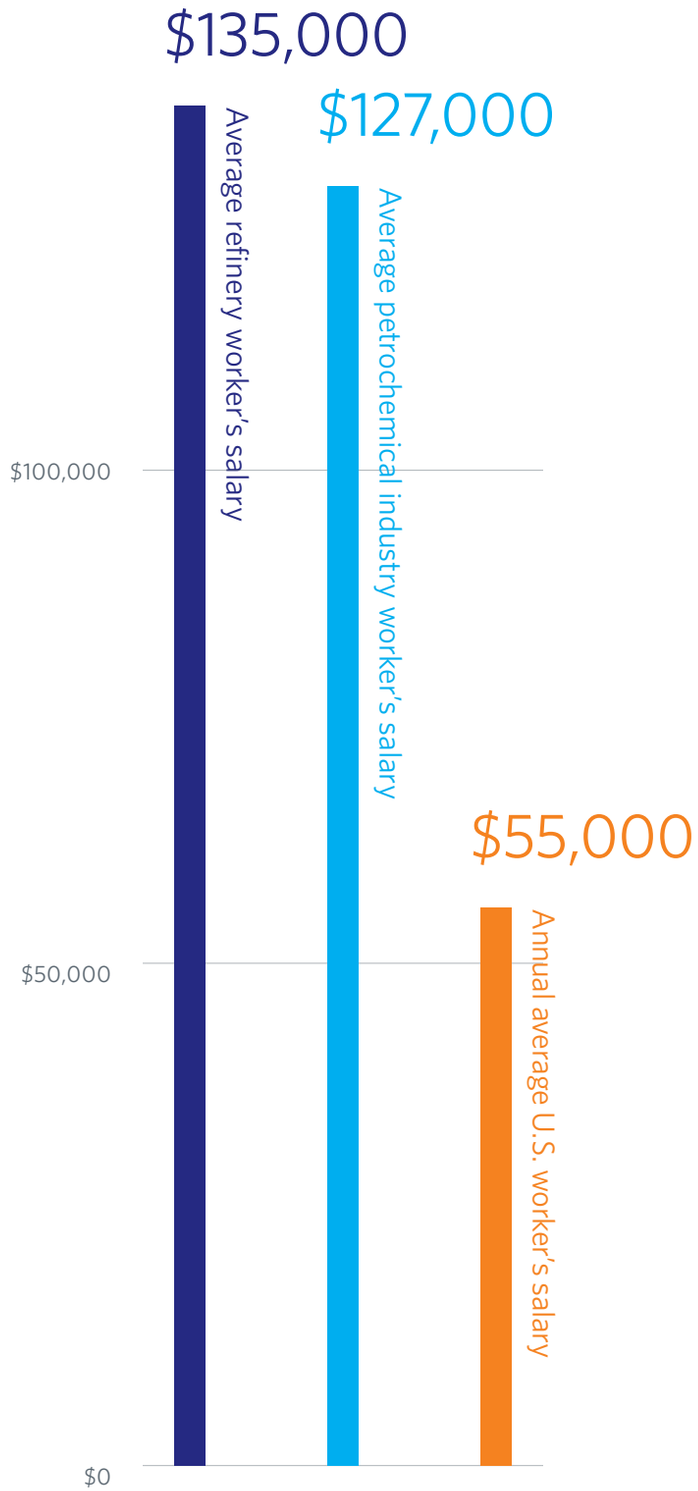
In the aftermath of Hurricane Harvey, two drone teams completed an entire site assessment in two weeks — an unprecedently quick amount of time.

Providing Lifelong Career Opportunities

Our U.S. refinery and petrochemical manufacturers are the most advanced in the world. We offer high-paying and highly-skilled jobs and life-long careers of all education levels to the people who work in our industries. The average annual salary of a refinery worker is almost $135,000 each year, and the average petrochemical industry worker's salary is over $127,000. Both far exceed the annual average U.S. worker's salary of just over $55,000.[19]

In addition to offering our employees good wages, our industries help to sustain and stimulate long-term growth in the U.S. labor market. AFPM member companies provide employment opportunities to almost four million Americans and add hundreds of billions of dollars to the American economy each year. As the demand for our products grows worldwide and we rise to the occasion to deliver them, the career opportunities within our industries will also grow.

Each year our industries provide almost 4 million job opportunities and add hundreds of billions of dollars to the American economy.



After Active Duty, Veterans Find New Purpose in Refinery Work

> " The refining industry to me is an amazing fit in that sense. It is also rewarding work that instills a sense of pride, similar to that sense of pride I felt while serving my country."
> – *Chad Harbin, Phillips 66*

Chad Harbin served in the Navy for more than five years as part of an American counter-narcotics team. After enlisting as a high school senior following the 9/11 attacks, he became part of a team responsible for patrolling the Pacific Ocean and Caribbean Sea.

At age 35, Harbin says defending the nation was his duty, and he was motivated to contribute to those efforts in any way he could. He is proud of his time in the military, but after those years of service, he was ready to "come home and live a more traditional lifestyle."

Today, he works at the Phillips 66 Wood River Refinery in Roxana, Ill., and is one of the 185,000 veterans employed by the oil, gas and petrochemical industries, including about 6,000 women and 41,000 minority veterans. Veteran recruitment has been boosted through industry partnerships with Hiring Our Heroes and American Jobs for America's Heroes.

Phillips 66 discovered Harbin through Hiring Our Heroes. At the Wood River Refinery, he's responsible for the mechanical integrity of process equipment — a perfect fit given his engineering aptitude, strong work ethic, meticulous attention to detail and lifelong commitment to service.

Harbin said when a Navy ship would set sail, he was often tasked with monitoring the equipment to ensure auxiliary systems were running smoothly and vital equipment checks were performed regularly. He was also responsible for making the tough calls on whether sailing on was feasible; if a critical piece of equipment faltered, he might recommend halting patrol or implementing a backup plan.

"It's really the same way that the refinery works," Harbin said. "Does it make practical business sense to bring a unit down? Or is it safe to operate at a lower capacity and continue to move forward until a more appropriate time? The refining industry to me is an amazing fit in that sense. It is also rewarding work that instills a sense of pride, similar to that sense of pride I felt while serving my country."



Supporting Our Communities



Our companies make significant contributions to the U.S. economy, including **paying more than $70 billion in federal taxes and $60 billion in state and local taxes.**[20]

Our companies make significant contributions to the U.S. economy, including paying more than $70 billion in federal taxes and $60 billion in state and local taxes, which help to provide essential community services.

Our member companies operate in all fifty states, and the more than four million employees who work in these industries are proud to be part of the communities in which they work and live. They believe that giving back to neighbors and people in need is a sound investment, and simply good business. Our members focus on contributions that align with their values and goals and support charities that address a wide range of health and human services.



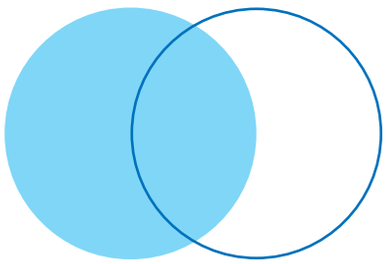
Support STEM education through scholarships and curriculum


Our members focus on contributions that align with their values and goals and support charities that address a wide range of health and human services.
Renovate homes for people in need
Provide funding and education to first responders
Fund and donate supplies to local food banks
Organize and participate in toy drives

Promoting Policies That Power Progress

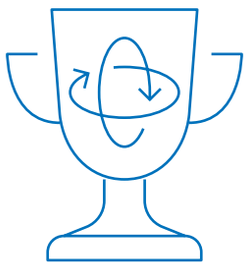
The United States needs policies that promote growth and investment in the refining and petrochemical manufacturing industries to help drive our economy, add jobs, increase energy security and remain competitive in a global economy.

These policies must:



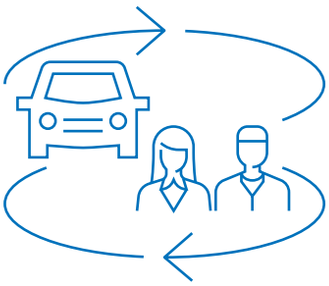
Enhance Transparency

The future of American manufacturing requires reasonable and cost-effective regulations. AFPM supports regulatory reform that enhance transparency, accountability and efficacy of federal regulations based in sound science.



Promote Competition

The refining and petrochemical industries welcome free-market competition unimpeded by market distorters including mandates and subsidies. Policymakers should also look to ensure U.S. companies operating abroad are treated fairly through a system of trade rules that facilitate cooperation and regulatory alignment, and reflect the reality of an integrated energy and petrochemical market. Finally, policymakers must ensure the full potential of the modernized tax code is realized to spur growth now and into the future.



Balance Needs for All Americans

U.S. policies should balance the need for affordable and reliable fuels and a growing economy with sound environmental policies. The essential role and many societal benefits that petroleum fuels, natural gas and petrochemicals provide our nation and the world should not be ignored.



Strengthen Our Foundation

The global gains of the U.S. refining and petrochemical industries can't be maintained or built upon unless our nation's infrastructure keeps pace. Investment in critical infrastructure, including roads, pipelines, rail, inland waterways and ports, are key to accessing and expanding the use of U.S. resources.

We must adopt policies that carefully assess needs vital for meeting current and future demands. This includes federal, state, and local government investment, regulatory reform that encourages private investment, and streamlining our regulatory system and permitting processes to facilitate prompt construction of critical new infrastructure, including pipelines.

2019 Industry Meetings

Each of our live events is thoughtfully designed to provide state-of-the-industry information in a dynamic and interactive format that encourages connections between attendees, presenters and exhibitors.

Annual Meeting
Marriott Rivercenter
San Antonio, TX
March 17 – 19, 2019

International Petrochemical Conference
Grand Hyatt San Antonio
San Antonio, TX
March 24 – 26, 2019

International Base Oils & Waxes Conference
Grand Hyatt San Antonio
San Antonio, TX
March 24 – 26, 2019

Security Conference
Sheraton Austin Hotel at the Capitol
Austin, TX
April 30 – May 1, 2019

Labor Relations/
Human Resources Conference
Sheraton Austin Hotel at the Capitol
Austin, TX
May 2 – 3, 2019

National Occupational and
Process Safety Conference
Gaylord Texan
Grapevine, TX
April 24 – 25, 2019

Reliability & Maintenance
Conference and Exhibition
Gaylord Texan
Grapevine, TX
May 21 – 24, 2019

Operations & Process Technology Summit
Marriott Rivercenter
San Antonio, TX
October 14 – 16, 2019

Environmental Conference
The Grand America Hotel
Salt Lake City, UT
October 27 – 29, 2019


AFPM
Final Program
Sheraton Austin Hotel at the Capitol Austin, Texas
April 30-May 1, 2019
afpm.org/conferences
#AFPMSC
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AFPM is the leading trade association representing the makers of the fuels that keep us moving and the petrochemicals that are the building blocks for modern life.

Our industries make life better, safer, healthier, and most of all, possible.

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The AFPM Board of Directors relies on the counsel and support of experts among its membership to accomplish specific association functions and plan for the association's future. There are 20 standing committees that serve to assist the Board in achieving AFPM's goals.

The **Associate Steering Committee** provides a forum for the association's contractors, suppliers, vendors and consultants, to communicate with the Board of Directors on items of mutual interest and support.
Chair: Jeff Webber, Altairstrickland, Inc.
AFPM Secretary: Susan Yashinskie

The **Base Oils & Waxes Committee** provides oversight and assistance on matters related to automotive oils, base oils and waxes.
Chair: H. Don Davis, Ergon, Inc.
AFPM Secretary: Daniel Strachan

The **Communications Committee** shares information, ideas and communications strategies to increase support by external audiences for policy positions established by the Executive Committee and adopted by the AFPM Board.
Chair: Chuck Rice, Marathon Petroleum Corporation
AFPM Secretary: Jaime Zarraby

The **CyberSecurity Subcommittee** provides information and recommendations on matters pertaining to cybersecurity and cyber threats.
Chair: Kenny Mesker, Chevron U.S.A. Inc.
AFPM Secretary: Daniel Strachan

The **Environmental Committee** provides a forum for members to exchange views and discuss environmental activities and advises the AFPM Board and staff on current environmental laws/regulations.
Chair: Matthew Hodges, Valero Energy Corporation
AFPM Secretary: David Friedman

The **Fuels Committee** provides information and policy recommendations concerning legislative, regulatory and motor fuel specification developments.
Chair: Rita Hardy, Flint Hills Resources, LLC
AFPM Secretary: Tim Hogan

The **Government Relations Committee** serves as the principal forum for sharing information, ideas and strategies on legislative and regulatory issues important to the refining and petrochemical industries.
Chair: Blake Barfield, HollyFrontier Corporation
AFPM Secretary: Geoff Moody

The **Issues Committee** advises the Executive Committee and provides direction and guidance to AFPM staff on current policy issues important to the refining and petrochemical industries.
Chair: Gary Heminger, Marathon Petroleum Corporation
AFPM Secretary: Geoff Moody

The **Labor Relations & Human Resources Committee** facilitates the exchange of information on matters related to industrial and labor relations, human resources practices and collective bargaining.
Chair: Chad Wilfong, Valero Energy Corporation
AFPM Secretary: Daniel Strachan

The primary purpose of the **Legal Committee** is to recommend litigation strategies to advance the interests of AFPM's members and the industry. The committee also provides guidance to the AFPM staff on legislative and regulatory proposals and general legal issues affecting the industry.
Chair: Sherry Hesselbein, Marathon Petroleum Corporation
AFPM Secretary: Rich Moskowitz

Please visit the AFPM website for a complete description of all committees and their rosters at www.afpm.org/committees.

The **Manufacturing Committee** provides technical support and recommendations on matters that affect facility operations and products including federal, state and local laws and regulations.
Chair: Jay Richert, Marathon Petroleum Corporation
AFPM Secretary: Gordon Robertson

The **Operational Planning Control & Automation Technologies Committee** focuses on sharing practical experience with the application management, and integration of computing technology in areas including process control and automation, modeling, real-time optimization and Internet-based applications.
Chair: Michael Barham, Marathon Petroleum Corporation
AFPM Secretary: Daniel Strachan

The **Petrochemical Committee** advises the AFPM Board and staff on current issues of importance to the petrochemical industry.
Chair: Colin Gouveia, Eastman Chemical Company
AFPM Secretary: Rob Benedict

The **Petrochemical Statistics Subcommittee** advises and assists the Petrochemical Committee and AFPM staff on matters pertaining to the collection and dissemination of statistics on petrochemical, including trade, production and inventories.
Chair: Lindsey Stephens, The Dow Chemical Company
AFPM Secretary: Rose Sabijon

The role of the **Reliability and Maintenance Committee** is to advise the AFPM Board of Directors on reliability, maintenance, and engineering matters and to provide for the exchange of relevant technical and safety information among the AFPM members, the petroleum refining and petrochemical industries in general and related industries. The Reliability and Maintenance Committee also promotes technical exchange by developing programs for the Reliability and Maintenance Conference; Labor Outlook Roundtable; Cat Cracker Seminar (biannual) and by cooperating with other AFPM committees in the development of technical programs for their conferences.
Chair: Hardy Kemp, Flint Hills Resources
AFPM Secretary: Gordon Robertson

The **Security Committee** provides a forum for the exchange of information among the membership on security-related issues within the petroleum refining and petrochemical manufacturing industries.
Chair: Jeff Culver, Koch Industries
AFPM Secretary: Jeff Gunnulfsen

The **State and Local Outreach Committee** purpose is to discuss state level legislative and regulatory issues of importance to AFPM's refining and petrochemical members. The Committee will advocate for AFPM policies at the state and local levels, as directed by the Issues Committee.
Chair: Brendan Williams, PBF Energy
AFPM Secretary: Don Thoren

The **Tax Policy Committee** provides analysis and recommendations on tax-related legislation and engages in regulatory matters at the U.S. Treasury Department and Internal Revenue Service.
Chair: Nicole Busey, Marathon Petroleum Corporation
AFPM Secretary: Justin Sykes

Committees

continued

The **Transportation & Infrastructure Committee** helps develop effective policy on Regulatory and Legislative matters related to transportation & infrastructure that promote AFPM member interests and improve the safe and efficient transport of fuel and petrochemicals products. The committee advocates for AFPM member companies by communicating their key role in the supply chain and their efforts to improve the safe and efficient transportation of essential fuel and petrochemical products.
Chair: Todd Miner, Motiva Enterprises
AFPM Secretary: Rob Benedict

The **Waxes Subcommittee** promotes the benefits of current and new wax uses and technologies to the marketplace as well as issues related to the safe handling transportation and specifications of petroleum wax.
Chair: George Hudak, Baker Hughes, a GE Company
AFPM Secretary: Daniel Strachan

The **Safety and Health Committee** provides a forum for members to exchange views and share occupational and process safety best practices and developments in safety related legislation and regulation.
Chair: Randy Patton, HollyFrontier Corporation
AFPM Secretary: Lara Swett

The **Distinguished Safety Award Subcommittee** reviews, interviews, and chooses recipients of the Distinguished Safety, Elite Gold and Elite Silver Awards – AFPM's most prestigious plant performance awards.
AFPM Secretary: Danny Forest

The **Immersive Learning Subcommittee** advises the Safety & Health Committee on emerging safety training technologies and develops training tools for AFPM members utilizing these emerging technologies.
Chair: Bjorn Olson, Flint Hills Resources
AFPM Secretary: Danny Forest

The **Industrial Hygiene Subcommittee** provides a forum for the exchange of information on industrial hygiene, regulatory and legislative trends and developments as well as other matters concerning industrial hygiene standards and practice.
Chair: Trevor Gillig, Marathon Petroleum Corporation
AFPM Secretary: Danny Forest

The **Occupational Safety Subcommittee** advises the Safety & Health Committee on AFPM occupational safety programs, including the Regional Network program, as well as data and metric collection programs such as the Incident Classification Matrix and the Injury & Illness Metrics.
Chair: Willis Jernigan, Koch Industries
AFPM Secretary: Danny Forest

Occupational Safety Regional Network

Central States Regional Network
Chair: Scott Willis, Phillips 66
AFPM Secretary: Rebecca O'Donnell

East Coast Regional Network
Chair: Bill McEnroe, Monroe Energy
AFPM Secretary: Rebecca O'Donnell

Eastern Gulf Coast Regional Network
Chair: Drew Graham, Phillips 66
AFPM Secretary: Daniel Forest

Mid-West Regional Network
Chair: Chris Conley, BP Products North America
AFPM Secretary: Rebecca O'Donnell

Pacific Coast Regional Network
Chair: Mike Kulakowski, Marathon Petroleum Corporation
AFPM Secretary: Daniel Forest

Rocky Mountain Regional Network
Chair: Scott Palmer, HollyFrontier Corporation
AFPM Secretary: Rebecca O'Donnell

Texas Gulf Coast Network
Chair: Drew Owen, Flint Hills Resources
AFPM Secretary: Rebecca O'Donnell

The **Process Safety Advisory Group (PSAG)** provide leadership, support and guidance to Advancing Process Safety (APS) programs in an effort to promote process safety performance excellence across the association memberships.
Chair: Ray Brooks, Marathon Petroleum Corporation
AFPM Secretary: Lara Swett

The **Process Safety Workgroup** is responsible for implementing the direction and vision of the Process Safety Advisory Group by providing oversight and direction to the Advancing Process Safety Programs (APS).
Chair: Rodney Reibold, Marathon Petroleum Corporation
AFPM Secretary: Lara Swett

Process Safety Regional Networks

Central States Regional Network
Chair: Randall Wilburn, Phillips 66
AFPM Secretary: Alyse Keller

East Coast Regional Network
Chair: Brian McTiernan, Monroe Energy
AFPM Secretary: Alyse Keller

Eastern Gulf Coast Regional Network
Chair: Brett Cowart, Placid Refining Company
AFPM Secretary: Eileen Scherzinger

Mid-West Regional Network
Chair: Samantha Garner, Ergon
AFPM Secretary: Eileen Scherzinger

Rocky Mountain Regional Network
Chair: Kyle Walter, CHS
AFPM Secretary: Eileen Scherzinger

Texas Gulf Coast Regional Network
Chair: Wendy Yafuso, Marathon Petroleum Corporation
AFPM Secretary: Alyse Keller

Hazard Identification & Practice Sharing
Chair: Jeff Todd, Marathon Petroleum Corporation
AFPM Secretary: Mawusi Bridges

Industry Outreach and Learning
Chair: Dan Wilczynski, Marathon Petroleum Corporation
AFPM Secretary: Mawusi Bridges

Information Resources

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 www.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
- Tech Update

Statistics

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

Petrochemical Statistics Subscriptions

- AFPM Petrochemical Surveys, Production & Inventory Statistics – quarterly
- Petrochemical Reports Trade Data – monthly

Technical Papers

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

Transcripts

Operations & Process Technology Summit

* Publications are distributed to members only.

Communications

AFPM is engaged in several communications campaigns and has an active social media presence.

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Membership

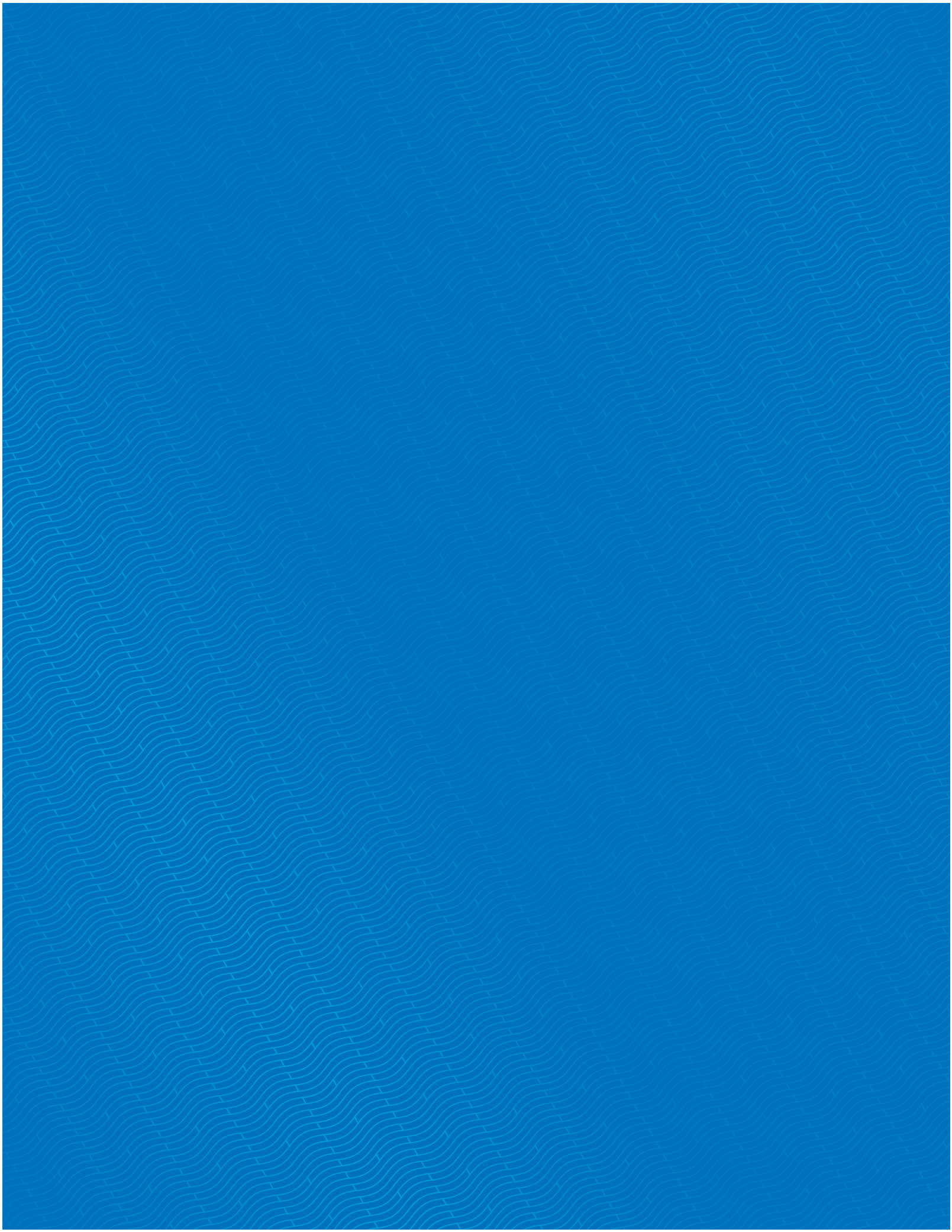
Join Today!

The vast majority of American petroleum refiners and petrochemical manufacturers, along with hundreds of industry service companies, are currently members of AFPM.

To find out more contact Latoya Britt at membership@afpm.org
202.457.0480
www.afpm.org/benefits-of-membership

Endnotes

1 U.S. Energy Information Administration, Number and Capacity of Petroleum Refineries
2 U.S. Energy Information Administration, Annual Energy Outlook
3 U.S. Energy Information Administration, Transportation Sector Energy Consumption (2018 - 2050)
4 U.S. Energy Information Administration, Number and Capacity of Petroleum Refineries
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11 U.S. Energy information Administration, historical data and AEO 2019 projections
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13 U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program; GHGRP Refineries
14 U.S. Environmental Protection Agency; GHGRP Chemicals
15 U.S. Environmental Protection Agency
16 U.S. Environmental Protection Agency
17 U.S. Bureau of Labor Statistics
18 American Fuel & Petrochemical Manufacturers, Source: 2017 AFPM PSE Report
19 U.S. Bureau of Labor Statistics
20 IMPLAN 2017 data





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