WE MAKE PROGRESS

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 makers of the fuels that keep our country and the world moving and the petrochemicals that are the building blocks for modern life. Our industries are noble and our products have transformed the world. We manufacture the fuels that power the cars, trucks and buses that get millions of people to work and to school each day. We make the petrochemicals that go into literally thousands of products like plastics, computers and medical equipment. Our industries make life better, safer, healthier and, most of all, possible.

We are critical to boosting the nation’s energy security and sustaining the U.S. economy. Over three million jobs in 33 states are supported by our 117 refineries and over 230 petrochemical facilities. Together, these industries add nearly $600 billion to the U.S. economy each year, and we do so while investing heavily in innovations, technological advancements and process efficiencies that reduce our environmental impact.

Our highest priority remains the safety and security of our employees, surrounding communities and our facilities. A continued focus on enhanced performance and operations, combined with advancements in our use of cutting-edge technology, have made the fuel and petrochemical industries among the safest and most secure in the nation.

This past year, our industries faced many challenges with unprecedented storms that threatened the heart of our operations. Despite the widespread flooding and devastation, our highly committed and talented workforce got operations up and running, resulting in minimal disruptions for consumers. And they contributed in countless ways to aid their communities by working alongside first responders and helping their neighbors rebuild. Their dedication, vigilance and courage are a testament to the character of the people who work in our industries.

In the coming year and beyond, AFPM will advocate for policies that promote growth and investments in our industries so that consumers have the products they have come to rely upon. Policies that enhance transparency, promote competition and balance the needs for all Americans will further improve the standard of living and strengthen the foundation of our nation.

As we look back on the accomplishments of 2017 and look ahead to the future, one thing is clear: the fuel and petrochemical industries are resilient, innovative and determined. We make many things, but above all, we make progress.

Joseph W. Gorder
Chairman, President and Chief Executive Officer,
Valero Energy Corporation
AFPM Chairman of the Board

Chet M. Thompson
President and Chief Executive Officer
American Fuel & Petrochemical Manufacturers
WE MAKE THE PRODUCTS THAT FUEL THE GLOBAL ECONOMY AND WILL REMAIN ESSENTIAL FOR YEARS.
U.S. refineries are among the most technologically advanced and efficient in the world. Our members own and operate 117 refineries that manufacture 96 percent of the refined petroleum products made in the United States.

Today, petroleum supplies about 98 percent of U.S. transportation fuels and is projected to continue supplying about 90 percent through mid-century, according to the Energy Information Administration (EIA).\(^1\) Petroleum products are also consumed in the commercial, industrial and residential sectors. In 2016, petroleum products supplied more than 25 percent of industrial demand for energy, four percent of commercial and four percent of residential demand.

The majority of petroleum products are used as transportation fuels. Last year, the United States consumed 143 billion gallons of gasoline and 84 billion gallons of diesel fuel, heating oil and jet fuel.\(^3\)

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1. Petroleum products are also consumed in the commercial, industrial and residential sectors. In 2016, petroleum products supplied more than 25 percent of industrial demand for energy, four percent of commercial and four percent of residential demand.

2. In 2016, U.S. refining capacity increased to more than 18.6 million barrels per day, accounting for almost 20 percent of global refining capacity.\(^2\)
The United States currently exports nearly 80 billion gallons of petroleum products to consumers in 99 countries. By 2040, U.S. exports are expected to top 110 billion gallons, and our products are expected to supply 30 percent of total world energy demand through 2050, according to the EIA.¹

MONTHLY U.S. REFINED PRODUCT EXPORTS IN MILLIONS OF GALLONS PER DAY (2010-2017 increases)

- **Motor Gasoline | 218 M**
- **Propane | 189 M**
- **Diesel Fuel and Heating Oil | 160 M**
- **Other Petroleum Products | 105 M**

U.S. WEST COAST EXPORTS
2.8 Billion Gallons

Mexico

Latin America
U.S. EAST COAST EXPORTS
1.5 Billion Gallons

U.S. MIDWEST EXPORTS
349 Million Gallons

U.S. GULF COAST EXPORTS
30.8 Billion Gallons
The U.S. petrochemical industry is well positioned to meet growing demand and continue to be a world leader in petrochemical production.

The products our petrochemical members produce play a large role in our lives today and will continue to be a significant part of our future. Products like ethylene, propylene and butadiene may not get much attention, but the products they make do. In the future, innovations made possible by petrochemicals could dramatically enhance the quality of life through breakthroughs in prosthetics and artificial organs, significantly improve transportation, keep food fresh for much longer, and even make for cleaner skies. If you can imagine it, chances are our products will be part of it.
SAVING LIVES

Vince was diagnosed with polycystic kidney disease when he was nineteen. He managed his condition with medications for many years, but in 2011, it wasn’t enough.

Family and friends were tested to see if they were a viable match, but none were found. Vince thought he had exhausted his list of possible donors, when a friend’s sister offered to be tested. Finally, a match!

Plans were made for the surgery and on a Friday the 13th in 2012, his donor flew from Oregon to Pennsylvania for the procedure.

Today, not a day goes by without him, his wife and their triplets being thankful to his donor and for the medical devices made from petrochemicals that kept him alive and the fuels that made his transplant possible.
WE CREATE THE JOBS THAT EMPLOY OVER 3 MILLION AMERICANS IN 33 STATES.
Today we are focused on educating the public about our industries to attract, educate and retain top talent who will encourage a diverse and valued workforce, while offering highly competitive salaries and levels of training and education. As we grow, so will the career opportunities for skilled and craft workers, U.S. veterans and those with business and STEM backgrounds.

The fuels and petrochemical industries have well-paying career opportunities for those with educational backgrounds that range from GED to PhD. Craft laborers in our industries earn higher salaries than teachers, nurses and other professions that require advanced degrees.

- **FUELING OPPORTUNITY**
  - Average annual salary of a refining worker: $111,500
  - Average annual salary of a chemical industry worker: $93,000
  - Average annual salary of a U.S. worker: $44,148
FUELING THE ECONOMY

We contribute nearly $600 billion to the U.S. economy including more than $65 billion in federal taxes and $21 billion in state and local taxes last year. This money directly supports first responders, teachers and other individuals working in communities across the country. Not only do our taxes support first responders, we also make the products that make the materials that keep them safe.
PROTECTING OUR PROTECTORS

In November 2006, Dan, a firefighter in Los Angeles, California, and his team were called to a two-story building that was fully engulfed in flames. While trying to put out the fire, the upper floor where he was standing gave way. Dan fell to the floor below and within seconds was up to his armpits in flames. Thankfully, his fellow firefighters pulled him from the blaze.

“I was certain my legs would be burned. I took my gear off; my legs were fine. I can’t say fossil fuels were at the top of my mind as I was struggling to escape from that building, but they were critical to saving my legs and my life that day.”

Dan and the thousands of firefighters across the country who have had similar experiences are thankful for the advances in products that are made from petrochemicals.

“I was grateful to the firefighters who pulled me out that day and to the oil and natural gas industries that develop the products that make us safe every day.”
WE MAKE THE INVESTMENTS THAT INCREASE THE SAFETY OF OUR EMPLOYEES, FACILITIES AND COMMUNITIES, AND REDUCE THE IMPACT ON THE ENVIRONMENT.
Safety is a core commitment of the U.S. refining and petrochemical industries. Providing a safe work environment for our employees and communities in which we operate is embedded in our culture, and we strive to achieve zero injuries, illnesses and process safety events.

Both the refining and petrochemical industries’ annual injury and illness rate is 0.6 per 100 full-time employees, well below many other industries and occupations. The refining and petrochemical industries rank second and third out of 520 manufacturers for the lowest rate of injury and illness.

AFPM is continuously working with our members to enhance performance and operations by offering a variety of tools and forums for our members to learn from each other to better protect the health and safety of our workers, contractors, neighbors and the environment in which we operate.

The goal of Advancing Process Safety is to reduce the frequency and severity of process safety events across our industries.

AFPM collects industries’ process safety data, analyzes that data to find opportunities for improvement, and develops tools and sharing opportunities to help our industries improve their process safety performance.

Over the past 28 YEARS the refining and petrochemical industries have reduced their rate of injury by a FACTOR OF TEN.

Sampling taken from source.
We have invested billions of dollars in technology, innovation and engineering efficiency to reduce the impact of our operations.

U.S. INCREASES SINCE 1990

- Gross Domestic Product | 191%
- Population | 28%
- Energy Consumption | 16%
- Vehicle Miles Traveled | 41%

Even with this growth, we reduced the six most common emissions by 67 percent. Transportation fuels are cleaner than ever today, and sulfur levels in gasoline have been reduced by 97 percent.¹³

Today, affordable fuels and petrochemicals are made and refined more safely, cleanly and efficiently than ever before, and more breakthroughs are to come.
### Reductions in Criteria Pollutant Emissions

#### Refineries

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>1990-2014 Decrease (1000 Tons)</th>
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<tbody>
<tr>
<td>SO2</td>
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<tr>
<td>NOx</td>
<td>300 to 75</td>
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<tr>
<td>VOC</td>
<td>300 to 80</td>
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<td>PM10</td>
<td>25 to 10</td>
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#### Petrochemical Facilities

<table>
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<tr>
<th>Pollutant</th>
<th>1990-2014 Decrease (1000 Tons)</th>
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<tbody>
<tr>
<td>SO2</td>
<td>180 to 40</td>
</tr>
<tr>
<td>NOx</td>
<td>160 to 20</td>
</tr>
<tr>
<td>VOC</td>
<td>80 to 0</td>
</tr>
<tr>
<td>PM10</td>
<td>18 to 0</td>
</tr>
</tbody>
</table>
USING LEADING-EDGE TECHNOLOGY

AFPM member companies are implementing leading-edge technology to reduce operational risk and increase efficiencies, making the workplace safer.

Our industries are leaders in proactive cyber risk management of IT and industrial control systems. We continually test systems and software, keep up on the latest threats in the cyber world and educate company employees on “cyber hygiene.”
Improving Operations with Drones

AFPM members are at the vanguard of using unmanned aerial vehicle technology (known as UAVs or drones) to improve operations, and effectively did so after Hurricane Harvey hit Houston in August.

In fact, they used drones to remotely take stock of facilities and identify damaged equipment. This helped shorten restart times and improve the safety of employees and surrounding communities, underscoring how important UAVs have become to refinery operations.
WE PLAN FOR EXTREME EVENTS TO MITIGATE CATASTROPHES AND SAVE LIVES.
The 2017 hurricane season was one of the most daunting in decades. But, with a lot of planning, coordination and hard work, our member companies succeeded in supplying the gasoline, diesel and jet fuel that moved people out of harm’s way and allowed first responders to reach those in need.

HURRICANE HARVEY IMPACTED:

60%
U.S. Petrochemical Production

25%
U.S. Refining Capacity

HURRICANES ALSO IMPACTED THE ENTIRE FUEL SUPPLY CHAIN INCLUDING:

- Refineries
- Ports
- Pipelines
- Terminals
- Rail Stations
- Gas Stations
- Plant Feedstocks and Products’
THE HURRICANES HAD THE POTENTIAL TO BE CATASTROPHIC FOR THE FUELS AND PETROCHEMICAL SUPPLY CHAIN. BUT THEY WEREN’T.

20/24
Just two weeks after Harvey made landfall, 20 of the 24 refineries had restarted.

70 PERCENT
Three weeks after Harvey made landfall, 70 percent of the impacted petrochemical production was back up and running.

DEMONSTRATING OUR RESILIENCY

Even in the midst of recovery from Hurricane Harvey, the refining industry prepared for Hurricane Irma – getting as much fuel into market as possible in advance of the storm and staging fuel off of both coasts of Florida to expedite getting fuel to its residents as soon as conditions were safe and infrastructure allowed.

We were able to do this because our dedicated workforce – many of whom were personally impacted by these storms – who activated sophisticated preparedness plans strengthened by lessons learned in the aftermath of previous storms. With more sophisticated preparedness plans, improved storm monitoring, hardened critical infrastructure and upgraded IT systems to help with employee location and assistance, we were prepared.

AFPM member companies took immediate action at their facilities and in their communities, many establishing advanced crisis centers to support employees and help safely meet the needs of communities struggling to navigate the impacts of this once-in-a-thousand-years storm.

Beyond donating tens of millions of dollars to humanitarian organizations, AFPM member companies responded with aid in countless ways, including:

- Pumping out and testing water in flooded neighborhoods
- Arranging short- and long-term housing for employees

Photo Courtesy of Bay Ltd.
Deploying company maintenance crews to employee homes to tackle clean-up and repairs
Underwriting medical expenses
Working with city officials to restore tap water to homes
Coordinating rental vehicles for employees whose vehicles were damaged or lost
Bringing convoys into impacted areas and contributing supplies such as vaccines, gasoline, food, cleaning supplies and water
WE PROMOTE POLICIES THAT POWER PROGRESS AND PREPARE US FOR THE FUTURE.
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:

1. ENHANCE TRANSPARENCY

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

2. PROMOTE COMPETITION

- The petroleum fuel refining and petrochemical industries welcome free-market competition unimpeded by market distorters, including mandates and subsidies.
- Policymakers should 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.

3. 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.
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.

4. 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.

INVESTING IN PIPELINES

The United States has the largest network of energy pipelines in the world, with more than 2.6 million miles of pipe transporting products including natural gas, crude oil and petroleum products.

Today, the energy industry is committed to continually updating the existing pipeline network to incorporate advancements in pipe manufacturing, pipe materials, construction methods and maintenance practices. In addition, because of our nation’s more efficient oil and natural gas production even more pipelines need to be constructed to fully unlock the potential of our domestic energy renaissance.
## 2018 Industry Meetings

### March

<table>
<thead>
<tr>
<th>Event</th>
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<th>Location</th>
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### April

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<thead>
<tr>
<th>Event</th>
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<tbody>
<tr>
<td>Security Conference</td>
<td>April 23 – 25, 2018</td>
<td>Omni Royal Orleans, New Orleans, LA</td>
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<tr>
<td>Labor Relations/Human Resources Conference</td>
<td>April 26 – 27, 2018</td>
<td>Omni Royal Orleans, New Orleans, LA</td>
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### May

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<thead>
<tr>
<th>Event</th>
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<tbody>
<tr>
<td>Reliability &amp; Maintenance Conference and Exhibition</td>
<td>May 22 – 25, 2018</td>
<td>Convention Center, San Antonio, TX</td>
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### August

<table>
<thead>
<tr>
<th>Event</th>
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<th>Location</th>
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<tbody>
<tr>
<td>Cat Cracker Seminar</td>
<td>August 21 – 22, 2018</td>
<td>Royal Sonesta Houston, Houston, TX</td>
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### September

<table>
<thead>
<tr>
<th>Event</th>
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<tr>
<td>Board of Directors Meeting</td>
<td>By Invitation</td>
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### October

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<tr>
<th>Event</th>
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<tbody>
<tr>
<td>Operations &amp; Process Technology Summit</td>
<td>October 1 – 3, 2018</td>
<td>Atlanta Marriott Marquis, Atlanta, GA</td>
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<tr>
<td>Environmental Conference</td>
<td>October 14 – 16, 2018</td>
<td>Marriott Rivercenter, San Antonio, TX</td>
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</tbody>
</table>
EXECUTIVE COMMITTEE

Mr. Joseph W. Gorder  
Chairman of the Board  
Chairman, President and  
Chief Executive Officer  
Valero Energy Corporation  
San Antonio, TX

Mr. Dave Brownell  
Senior Vice President  
of Global Operations  
ExxonMobil Fuels & Lubricants Company  
Exxon Mobil Corporation  
Spring, TX

Mr. Gary R. Heminger  
Vice Chairman  
Chairman and Chief Executive Officer  
Marathon Petroleum Corporation  
Findlay, OH

Mr. Graeme Burnett  
Chairman of the Board  
Monroe Energy, LLC  
Atlanta, GA

Mr. George J. Damiris  
Treasurer  
Chief Executive Officer and President  
HollyFrontier Corporation  
Dallas, TX

Mr. Daniel Coombs  
Executive Vice President,  
Global Manufacturing,  
Projects, Refining and Technology  
LyondellBasell Industries  
Houston, TX

Mr. Gregory J. Goff  
Past Chairman  
Chairman, President and  
Chief Executive Officer  
Andeavor  
San Antonio, TX

Mr. Michael Coyle  
President, Manufacturing  
Chevron U.S.A. Inc.  
San Ramon, CA
Mr. Robert A. Herman  
Executive Vice President, Refining  
Phillips 66  
Houston, TX

Mr. David Lamp  
President and Chief Executive Officer  
CVR Energy, Inc.  
Sugarland, TX

Mr. James S. Loving  
Senior Vice President, Refining, Pipelines and Terminals  
CHS Inc.  
Inver Grove Heights, MN

Mr. Thomas J. Nimbley  
Chief Executive Officer  
PBF Energy Inc.  
Parsippany, NJ

Mr. Jeff Ramsey  
President and Chief Executive Officer  
Flint Hills Resources, LP  
Wichita, KS

Mr. J. Douglas Sparkman  
Chief Operating Officer of Fuels, North America and Chairman of the Board  
BP Midstream Partners  
Chicago, IL
<table>
<thead>
<tr>
<th>Company</th>
<th>Director</th>
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<tr>
<td>Albemarle Corporation</td>
<td>Raphael Crawford</td>
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<tr>
<td>American Refining Group, Inc.</td>
<td>Brian Zolkos</td>
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<td>Gregory Goff</td>
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<td>Arkema Inc.</td>
<td>Richard Rennard</td>
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<td>Jim Macaluso</td>
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<td>Big West Oil, LLC</td>
<td>Mark Keim</td>
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<td>BP Petrochemicals</td>
<td>Luis Sierra</td>
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<td>BP Products North America</td>
<td>Doug Sparkman</td>
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<td>Braskem America, Inc.</td>
<td>Mark Nikolich</td>
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<td>Paul Mikesell</td>
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<td>Matthew Smorch</td>
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<td>Darren Cross</td>
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<td>David Lamp</td>
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<td>Frederec Green</td>
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<td>Mike Humby</td>
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<td>Enterprise Products Operating LLC</td>
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<td>Ergon, Inc.</td>
<td>Kris Patrick</td>
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<td>ExxonMobil Chemical Co.</td>
<td>M.J. (Matt) Aguiar</td>
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<td>Exxon Mobil Corporation</td>
<td>Dave Brownell</td>
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<td>Flint Hills Resources, LP</td>
<td>Jeff Ramsey</td>
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<td>Formosa Plastics Corporation, USA</td>
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<td>HollyFrontier Corporation</td>
<td>George Damiris</td>
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<td>Honeywell Inc.</td>
<td>Sridhar Srinivasan</td>
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<td>Honeywell UOP</td>
<td>Rebecca Liebert</td>
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<td>Hunt Refining Company</td>
<td>Tom Schmitt</td>
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<td>Huntsman Corporation</td>
<td>Douglas Culpon</td>
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<td>Husky Energy</td>
<td>Bob Baird</td>
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<td>INEOS Olefins &amp; Polymers USA</td>
<td>Michael Nagle</td>
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<td>Koch Industries</td>
<td>David Dotson</td>
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</table>
LyondellBasell Industries  
Daniel Coombs

Marathon Petroleum Corporation  
Gary Heminger

Marathon Petroleum Corporation  
Raymond Brooks

Monroe Energy, LLC  
Graeme Burnett

Motiva Enterprises LLC  
Brian Coffman

NALCO Champion  
Danny Rey

NOVA Chemicals Corporation  
Naushad Jamani

Occidental Chemical Corporation  
Robert Peterson

Olin Chlor Alkali Products and Vinyls  
John McIntosh

Oxea Corporation  
Purnendu Rai

Par Petroleum, LLC  
Joseph Israel

Pasadena Refining System, Inc.  
Fernando Oliveira

PBF Energy Inc.  
Thomas Nimbley

Phillips 66  
Robert Herman

Placid Refining Company  
Dan Robinson

SABIC  
Mike Walsh

Shell Oil Products US/Shell Chemical Company  
Greg Willms

Sinclair Oil Corporation  
Clint Ensign

Solenis  
John Schumann

South Hampton Resources, Inc.  
Simon Upfield-Brown

SUEZ Water Technologies & Solutions  
Raymon Barlow

The Dow Chemical Company  
Douglas May

The International Group, Inc.  
Ross Reucassel

Total Petrochemicals & Refining USA, Inc.  
Christophe Gerondeau

TPC Group  
Edward Dineen

U.S. Oil & Refining Co.  
Cameron Proudfoot

Valero Energy Corporation  
Joseph Gorder

Valero Energy Corporation  
Lane Riggs

W. R. Grace & Co.  
Thomas Petti

Westlake Chemical Corporation  
Albert Chao

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INTERNATIONAL MEMBERS

ASAHI KASEI Corporation
Axion Energy
Federico Garcia Verdier

Mitsui & Co. (U.S.A.), Inc.
Yuichi Masuda

China Petrochemical
Technology Company Limited
Zhong Yonggang

Petrojam Limited
Kailyn Burnett

PETROTRIN

Delamine B.V.
Gert van der Knaap

Samsung C&T America, Inc
Jeremy Kim

DESARROLLO CORPORATIVO
IDESA, S.A. DE C.V.
Bernardo Alvarez Certucha

Solvay

Evonik Corporation
Ronald Birnbaum

Sumitomo Corporation
of Americas
Jill Walters

Irving Oil Limited

UBE Industries
(America), Inc.
Shin Kawasuso

ITOCHU Chemicals
America Inc.
Takuya Kobayashi

Versalis S.p.A.
Stefano Soccol

Marubeni America
Corporation
Kazuki Aikawa

MEGlobal
Jim Ashworth

Mitsubishi International
Corporation
Miya Kumar

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ASSOCIATE MEMBERS

Advanced Refining Technologies
Andre Lanning

AdvanSix
Erin Kane

AECOM
Linsey DeBell

Aegis Energy Advisors Corp.
Garfield Miller

Air Liquide Large Industries U.S. LP
Susan Ellerbusch

Airgas, Inc.
Lee Scoggins

AkzoNobel Polymer Chemistry
Rob van de Graaf

Alfa Laval Packinox
Thierry Sourp

AlixPartners LLP
Eric Hillenbrand

All4 Inc.
Kristin Gordon

Allied Universal
Jerry Drumwright

Allied Universal Security
Adam Serna

AltairStrickland, Inc.
Jeffrey Webber

Altran North America
Steve Genca

Ambitech Engineering Corporation
Allan Koenig

Argo, Inc.
Alan Free

Argus Media
Kristine Klavers

Aspen Technology, Inc.
Karsten Harstad

Asset Performance Networks
George DeBakey

Athlon Solutions
Michael McShan

Atlantic Methanol Production Co.
Edson Jones

Austin Industrial, Inc.
Barry Babyak

Axens North America
Christian Vaute

Babcock & Wilcox
Ashley Colando

BAKER & O’BRIEN
William Robert Donnell

Barr Engineering Company
Joel Trinkle

Bay Ltd.
Robert Blair

Bouchard Transportation Co., Inc.
Morton Bouchard III

Brand Energy and Infrastructure Services
Richard Krebs

Brenntag North America, Inc

Brinderson

Brock Group
Michael McGinnis

Burns & McDonnell
David Nispel

C&I Engineering
Clifford Speedy
ASSOCIATE MEMBERS (CONTINUED)

Cajun Industries, LLC  
Brett Hughes

Catalyst & Chemical Containers  
William Stacy

CB&I  
Scott Wiseman

Cenovus Energy Inc.  
Keith Chiasson

CertifiedSafety, Inc.  
Linda Duran

CH2M  
Samir Dave

Chem32 LLC  
Soren Marklund

Chemical Data  
Charles Sievert

Chemium International Corp.  
Thomas Holzmann

Chevron Lummus Global LLC  
Janna Chin

Clariant Corporation  
Robert Graupner

Clean Air Engineering  
Scott Evans

Clean Harbors Environmental Svcs  
Anthony Lerubino

Contanda LLC  
Kortnie Joyner

Contract Fabricators, Inc  
Boyce DeLashmit

Cooling Tower Depot, Inc.  
Dennis Sheldon

Crystaphase  
John Glover

Cust-O-Fab  
Dean Ojeda

DEWright, Inc.  
David Wright

Dorfl Ketel Chemicals, LLC  
Terry LaFleur

Downstream Advisors, Inc.  
Steven Graybill

Dupont Clean Technologies  
Kevin Bockwinkel

Echo Group, Ltd.  
Mike Roebuck

Emerson Automation Solutions  
Jerry Brown

Environmental Resources Management  
Toby Hanna

Ethylene Strategies International, LP  
Mark Woods

Eurecat U.S. Incorporated  
Frederic Jardin

Evergreen North America Industrial  
Kelli Motley

Excel Modular Scaffold  
Dylan Fulton

Fluor Corporation  
Maureen Price

Gallop Tower Field Service  
Tim ReBeau

Gantrade Corporation  
H. Aaron Parekh

Gayesco-WIKA USA  
Robert Torgerson

GHD Services  
Frederick Rappold
Gladieux Metals Recycling
Gerardo Valdes

Graywolf Industrial Company
Jack Allen

GTC Technology US, LLC
Chuck Fink

Gulf Publishing - Hydrocarbon Processing
Catherine Watkins

Gulfspan Industrial, LLC
Jake Smalley

Haldor Topsoe, Inc.
Henrik Rasmussen

Hargrove Engineers + Constructors
Ralph Hargrove

Helm AG
Volker Seebeck

Hertz Equipment Rental Corporation
James Fiscus

Houston Area Safety Council (HASC)
Russell Klinegardner

Hunter Buildings & Manufacturing, LP
Buddy Tucker

HydroChem LLC
David Thompson

ICIS
Chris Hedge

ICL
Anantha Desikan

IHS Markit
Brenda Lescarbeau

IMI Z&J
Karen Frericks

Infiniteum USA L.P.
Denise Jacobs

Innospec Fuel Specialties LLC
Jim Vrzak

Inserv - Integrated Service Company LLC
Gordon Hampton

InterAtlas Chemical Inc.
Paul Bozek

ioMosaic Corporation
Georges Melhem

J.J. White, Inc.
James White

Jacobs Engineering Group Inc.
Brent Schier

JCL Safety Services
James Leffler

Johnson Matthey
Jennifer Rennick

Katten Muchin Rosenman LLP
Mark Farley

KBC Advanced Technologies, Inc.
Andrew McMullan

KBR
Douglas Kelly

Kiewit
Shayne Andersen

Kirby Inland Marine, LP

Kolmar Americas, Inc.
Rafael Aviner

KP Engineering, LP
William Heimbaugh

KPMG LLP
Regina Mayor
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<tr>
<th>Company Name</th>
<th>Associate Members (Continued)</th>
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<tbody>
<tr>
<td>LANXESS Corporation</td>
<td>James Raines</td>
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<tr>
<td>Lauren Engineers &amp; Constructors, Inc.</td>
<td>Randal Lipps</td>
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<td>LBC Houston, LP</td>
<td>Russell Crawford</td>
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<tr>
<td>Lewis Goetz</td>
<td>Terry Subia</td>
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<td>Linde Engineering North America Inc.</td>
<td>Ron Helmeck</td>
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<tr>
<td>LOADSTAR Product Handling Services, LLC</td>
<td>Brian Haymon</td>
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<td>Lucite International Inc.</td>
<td>Robert Connolly</td>
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<td>Lummus Technology</td>
<td>Helion Sardina</td>
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<td>Matheson</td>
<td>Lori McDowell</td>
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<td>Matrix Service</td>
<td>Kati Zumwalt</td>
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<td>Merichem Company</td>
<td>Kendra Lee</td>
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<td>Meridium Inc.</td>
<td>Jane Bailey</td>
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<td>MERRICK &amp; Company</td>
<td>Travis Beatle</td>
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<td>Middough Inc.</td>
<td>Daniel Lowry</td>
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<td>MISTRAS Group Inc.</td>
<td>Sotirios Vahaviolos, PhD</td>
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<td>Montrose Environmental Group, Inc.</td>
<td>Daniel Fitzgerald</td>
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<td>Muse, Stancil &amp; Company</td>
<td>Neil Earnest</td>
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<td>Nooter Corporation</td>
<td>Bernard Wicklein</td>
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<td>North West Redwater Partnership (NWR)</td>
<td>Mitchell Loughlin</td>
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<td>Norton Engineering Consultants, Inc.</td>
<td>James Norton</td>
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<td>NovaPex</td>
<td>Laurent Castor</td>
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<tr>
<td>Odfjell USA (Houston) Inc.</td>
<td>David Ellis</td>
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<tr>
<td>Ohmstede</td>
<td>Doug Harrington</td>
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<td>Oiltanking</td>
<td>Rance Fromme</td>
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<td>Old World Industries, LLC</td>
<td>James Bryan</td>
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<tr>
<td>Opportune LLP</td>
<td>Matthew Flanagan</td>
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<tr>
<td>OSIssoft</td>
<td>J. Kennedy</td>
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<td>ParFab Companies</td>
<td>Frank Wolfe</td>
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<td>Lee Jenkins</td>
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<td>Perstorp Specialty Chemicals</td>
<td>David Wolf</td>
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<td>Pilko &amp; Associates, Inc.</td>
<td>George Pilko</td>
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<tr>
<td>Porocel International, LLC</td>
<td>Terence McHugh</td>
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</table>
ASSOCIATE MEMBERS (CONTINUED)

T.A. Cook  
Cameron Mathews

TapcoEnpro, LLC.  
David Anderson

Tauber Oil Company  
Richard Tauber

Team, Inc.  
Ted Owen

Technip USA  
Charles Fryer

Tetra Tech, Inc.  
Perry Lankford

Texas Aromatics L.P.  
Melbern Glasscock

The Equity Engineering Group  
David Osage

The Linde Group  
Raghu Menon

Third Coast International  
Jim Clawson

Total Safety U.S., Inc.  
Troy Thacker

TRC  
Christopher Vincze

Tricon Energy, Ltd.  
Ignacio Torras

TRICORD Consulting, LLC  
Joe Ibanez

Trihydro Corporation  
Calvin Niss

Trinity Consultants, Inc.  
John Hofmann

TrinityRail  
Gregg Yates

Turner Industries Group, LLC  
Tobie Craig

Turner, Mason & Company  
Michael Leger

United Rentals, Inc.  
Michael Abbey

Univar USA Inc.  
George Fuller

Universal Plant Services, Inc.  
Brad Jones

Vallen  
Matthew Dulaney

Vapor Point, LLC  
Jeffrey St. Amant

Veolia North America  
Miranda Schield

Vopak Americas  
Dick Richelle

Waid Environmental  
Jason Graves

Weaver  
Wade Watson

Wood Group  
Vikas Moharir

Wood Mackenzie  
Samuel Davis

WorleyParsons  
Paul Fisher

Yokogawa  
Eric Heavin

Zachry Group  
Keith Manning
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COMMITTEES

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 21 committees that serve to assist the Board in achieving AFPM’s goals.

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

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 **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:** Michael Hopperton, BP Products North America  
**AFPM Secretary:** David Friedman

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:** Latoya Britt

The **Fuels Committee** provides information and policy recommendations concerning legislative, regulatory and motor fuel specification developments.

**Chair:** Fred Walas, Marathon Petroleum Corporation  
**AFPM Secretary:** Tim Hogan

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  
**AFPM Secretary:** Jaime Zarraby

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:** Jake Menefee, Marathon Petroleum Corporation  
**AFPM Secretary:** Geoff Moody
The Legal Committee provides legal and litigation strategy recommendations to advance the interests of the Association membership.

**Chair:** Trevor Black, Chevron U.S.A. Inc.
**AFPM Secretary:** Rich Moskowitz

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 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:** Terry Truitt, Chevron Phillips Chemical Company LP
**AFPM Secretary:** Daniel Strachan

The Reliability & Maintenance Committee promotes the exchange of technical information and proven practices on reliability, maintenance, inspection, procurement, project engineering and turnarounds.

**Chair:** Rodney Goodwin, DuPont
**Secretary:** Gordon Robertson

The Petrochemical Committee advises the AFPM Board and staff on current issues of importance to the petrochemical industry.

**Chair:** Raphael Crawford, Albemarle Corporation
**AFPM Secretary:** James McCloskey

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:** Brian Sinn, Enterprise Products Operating LLC
**AFPM Secretary:** Rose Sabijon

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:** Alan Davis, Chevron U.S.A. Inc.
**AFPM Secretary:** James McCloskey

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:** Adi Punuru, ExxonMobil
**AFPM Secretary:** Daniel Strachan
COMMITTEES (CONTINUED)

The **Safety & 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:** Michael Ingraham, BP Products North America  
**AFPM Secretary:** Lara Swett

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:** Pete Conroy, CITGO Petroleum Corporation  
**AFPM Secretary:** Gordon Robertson

The **Cybersecurity Subcommittee** provides information and recommendations on matters pertaining to cybersecurity and cyber threats.

**Chair:** Kenny Mesker, Chevron U.S.A.  
**AFPM Secretary:** Daniel Strachan

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:** Audrey Miller, Phillips 66  
**AFPM Secretary:** Geoff Moody

The **Transportation & Infrastructure Committee** helps develop effective policy on regulatory and legislative matters related to transportation and infrastructure that promote AFPM member interests and improve the safe and efficient transport of fuels and petrochemical 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 fuels and petrochemical products.

**Chair:** Ryan Biggs, Andeavor  
**AFPM Secretary:** Rob Benedict

The **State & Local Outreach Committee** provides a forum 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 **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
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.

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<td>• Selected Petrochemical Statistics Trade Data — monthly</td>
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<tr>
<td>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 industry.</td>
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<tr>
<td>AFPM continues to increase its media visibility and rapid response capabilities across print, online, radio and television outlets.</td>
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<tr>
<td>AFPM also has an active social media presence that includes Twitter, LinkedIn and Facebook; an AFPM podcast called Flashpoint; the Petro Primer Blog at blog.AFPM.org. and Grounded in Fact blog at <a href="http://www.groundedinfact.com">www.groundedinfact.com</a>.</td>
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<td>• Biennial Cat Cracker Seminar Q&amp;A</td>
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<td>• Operations &amp; Process Technology Summit</td>
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1. Energy Information Administration, Annual Energy Outlook 2017
2. Energy Information Administration, Refinery Capacity 2017
3. Energy Information Administration, Annual Energy Outlook 2017
4. Energy Information Administration, Annual Energy Outlook 2017
6. IMPLAN
7. API
10. IMPLAN
12. 2016 AFPM Occupational Injury and Illness Report
14. AECOM, 2017