Telling Our Story
Constructive Conversations Toolkit
Imagine working in an industry that has done more than any other to improve the condition of mankind. Sounds a bit lofty, right? But, as one of the millions of women and men working in the fuels and petrochemical manufacturing industries — you do.

Our industries have transformed transportation, medicine, agriculture, and technology. We’ve reduced emissions by almost 70 percent\(^1\), while productivity and our standard of living have increased. And, our positive impact has staying power. For more than a century, we have fueled human progress, and will continue to be at the center of innovation for decades to come.

Unfortunately, the public often does not understand our industries and how vital they are to our way of life. So, the American Fuel & Petrochemical Manufacturers (AFPM) has launched an effort to provide industry employees with the resources needed to have more constructive conversations about what we do, and more importantly, WHY we do what we do.

Creating the building blocks for modern life, we make the fuels and petrochemicals that:
- **give us the freedom** to go where we want, when we want;
- **provide the opportunity** to live a comfortable, safe, healthy life; and
- lift billions of **people out of poverty** with affordable and reliable energy.

We know it and now we need the world to know it. To change the discourse, we need the help of men and women who work in our industries. You are our best spokespeople.

Let’s talk to our families, our friends, our communities, and at our kids’ schools. Let’s tell them why we do what we do and explain the positive impact on their daily lives, on our country, and on the world – now and into the future.

This guide will help you get started. It includes answers to the most commonly asked questions, ways you can help change the narrative, and links to more resources.

No one else will do this for us. We need to tell our whole story and we need to start now. Thank you for your help in making a real and positive difference and for any suggestions to improve or expand this effort.

When you are ready to get started, join us at [https://empower.afpm.org](https://empower.afpm.org) for more information and opportunities.

Chet M. Thompson  
*President and CEO*  
*American Fuel & Petrochemical Manufacturers*

---

\(^1\) Environmental Protection Agency, *Comparison of Growth Areas and Emissions, 1980-2016*
five common questions about our industries and how to answer them
Q: Why are the fuel and petrochemical industries so important?

A: Because they power human progress.

Fossil fuels are the most affordable, plentiful, and reliable energy source. They are used to produce more than 80 percent of the world’s power — for electricity, transportation, and heating. Every global citizen deserves access to safe, reliable, affordable energy and the human progress it enables. Energy fuels the education, sanitation, and health care that sets families on a better economic pathway.

And, our industries power every other industry. Transportation, medicine, agriculture, technology – almost all of the innovations in these areas are made possible by fuels and petrochemicals. The fuels we make keep us moving and the petrochemicals we manufacture are the building blocks for just about everything that makes modern life possible. There are currently no substitutes for our products that can be delivered at scale as affordably and reliably – and this is predicted to continue well into the future.

Together, our industries contribute $568 billion to the U.S. economy and directly and indirectly employ more than 3 million Americans.²

In 2014, there were 1.09 billion humans on the planet who did not have access to reliable electricity.⁴

High GDP correlates with high energy consumption⁵

---

² U.S. Energy Information Administration
³ IMPLAN 2016
Our industries are strongly committed to clean air, clean water, and waste reduction and have invested hundreds of billions of dollars to dramatically reduce emissions. We have an outstanding record of compliance with Environmental Protection Agency rules and other regulations.

At AFPM, we welcome the debate about climate policies, but insist that those debates be intellectually honest and recognize that reliable energy provided by fossil fuels has lifted billions out of poverty worldwide and has given us the highest standard of living in human history – and will continue to far into the future.

Since 1990 in the U.S., our Gross Domestic Product is up 191 percent, our population has grown by 28 percent, vehicle miles traveled is up 41 percent, and energy consumption is up 16 percent. It’s been a high-growth era, yet we’ve managed to cut the six most common emissions by 67 percent, and ozone levels have decreased 31 percent. Transportation fuels are cleaner than ever, and sulfur levels in gasoline have been reduced by 97 percent.

We use a range of advanced processes to protect the environment. And, we have made pipelines the safest, most reliable way to transport oil and natural gas by embedding safety into the entire pipeline lifecycle.

---

**Q:** Aren’t fossil fuel-based industries bad for the planet?

**A:**

Our industries are strongly committed to clean air, clean water, and waste reduction and have invested hundreds of billions of dollars to dramatically reduce emissions. We have an outstanding record of compliance with Environmental Protection Agency rules and other regulations.

At AFPM, we welcome the debate about climate policies, but insist that those debates be intellectually honest and recognize that reliable energy provided by fossil fuels has lifted billions out of poverty worldwide and has given us the highest standard of living in human history – and will continue to far into the future.

Since 1990 in the U.S., our Gross Domestic Product is up 191 percent, our population has grown by 28 percent, vehicle miles traveled is up 41 percent, and energy consumption is up 16 percent. It’s been a high-growth era, yet we’ve managed to cut the six most common emissions by 67 percent, and ozone levels have decreased 31 percent. Transportation fuels are cleaner than ever, and sulfur levels in gasoline have been reduced by 97 percent.

We use a range of advanced processes to protect the environment. And, we have made pipelines the safest, most reliable way to transport oil and natural gas by embedding safety into the entire pipeline lifecycle.

---

### REDUCTIONS IN CRITERIA POLLUTANT EMISSIONS

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Refineries 1990-2014 (DECREASE IN 1000 TONS)</th>
<th>Petrochemical Facilities 1990-2014 (DECREASE IN 1000 TONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO2</td>
<td>-67%</td>
<td>-97%</td>
</tr>
<tr>
<td>NOX</td>
<td>-75</td>
<td>-20</td>
</tr>
<tr>
<td>VOC</td>
<td>-80</td>
<td>-20</td>
</tr>
<tr>
<td>PM10</td>
<td>-10</td>
<td>-18</td>
</tr>
</tbody>
</table>

---

6. [https://www.epa.gov/air-trends](https://www.epa.gov/air-trends)

It's great to diversify our energy supply, as we need all the energy we can get. Compared to energy sources like wind, solar, and alternative fuels, oil and natural gas are unique in their ability to meet demand reliably and affordably.

Fossil fuels have more energy density than any other energy source. This means that the same amount of energy uses less space and is easier to transport, making fossil fuels more efficient, economical, and reliable.

Energy density makes fossil fuels very hard to replace and that is why renewables are only expected to reach 14 percent of our energy mix by 2050 whereas fossil fuels are projected at 79 percent.8

Also, we can’t forget about petrochemicals – those chemical compounds that are primarily made from oil and natural gas and that are used to make almost every product that makes modern life possible from iPhones to heart valves to lightweight car parts.

In terms of bang-for-the-buck, no product offers nearly the energy density or efficiency of fossil fuels to support our lifestyles and future innovations.

Can’t we just replace fossil fuels with renewables?

One gallon of gasoline contains as much energy as

- burning 5 logs
- or 13,000 AA batteries

---

8 U.S. Energy Information Administration, *Annual Energy Outlook 2018*
Our families live, learn, and thrive in the communities where our petrochemical and refining facilities are located, and we remain committed to keeping everyone safe and the environment protected. To achieve our goal of zero incidents we make safety part of our culture. We are among the safest of all manufacturing industries and have one of the lowest rates of injury and illness – even lower than the professional services sector (we’re talking law and accounting)!

And, to protect our communities and the environment during weather events, we take steps like elevating critical equipment and control rooms to avoid flooding, adding redundant power supplies, and putting containment measures in place to absorb chemicals and reduce the risk of release. We’re always learning from past weather events and continue to invest in cutting-edge technology and advanced processes to minimize impact.

### Injury rates in various industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Injury Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Transportation</td>
<td>6.7</td>
</tr>
<tr>
<td>Crop Production</td>
<td>5.9</td>
</tr>
<tr>
<td>Grocery Store Workers</td>
<td>4.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.6</td>
</tr>
<tr>
<td>Business Services</td>
<td>1.4</td>
</tr>
<tr>
<td>Library Workers</td>
<td>1.1</td>
</tr>
<tr>
<td>Petrochemical Manufacturing</td>
<td>0.6</td>
</tr>
<tr>
<td>Refining</td>
<td>0.6</td>
</tr>
<tr>
<td>Computer Storage Device Manufacturing</td>
<td>0.5</td>
</tr>
</tbody>
</table>

### Injury rate reduction

Over the past 28 years the refining and petrochemical industries have reduced their rate of injury by a factor of ten.

---

The short answer is — not us.

The retail price of gasoline is impacted by a variety of factors.

The price of crude oil (which is determined on the global market) is the main determinant of the price of gasoline, but refining costs, taxes, and marketing and distribution costs also contribute to gasoline prices. And, the price of gasoline varies by state and region because of differences in gasoline specifications, state and local taxes, and costs to transport fuels into the state or region.

Gas prices are constantly changing. 2017 average retail gas prices are broken down in the graphic below. ¹⁰
so, **what do I do with this information?**

Having a constructive conversation about our industries is not always easy, especially when there is so much misinformation out there. Our goal is to get these conversations started in communities across the country just by having employees telling their own personal stories about their experiences in the industry. We’re not asking anyone to become a media spokesperson or to try to convince anyone of anything, but rather to spark a curiosity in those open to learning more.
Here are a few ways you can spark curiosity and interest:

Talk about what you do with friends and family. You can change the way friends and family think about our industries by sharing what you do. They may not listen to an elected official or a “talking head,” but they will likely listen to you. And knowing what matters to them, allows you to tell a story and engage in a constructive conversation easily and effectively. Tell them about a new project you’re working on, or a major accomplishment, or a community project you’re a part of. Using stories like these will educate them on the varied aspects of our industries and provide a first-hand look at the positive impact we have every day.

Correct misconceptions online. Social media is part of our daily lives and many rely on it for their news. These online communities shape perspectives and influence the narrative about our industries. With your knowledge and experience you have the credibility to correct misconceptions when you see them and before they take hold. Using the information in this guide and the resources on the AFPM EMpower website (https://empower.afpm.org), you can point to facts and figures to correct inaccuracies or outdated information. Please refer to your company’s social media policies before commenting online.

Give a presentation at a local school or for a community group. One of the resources AFPM is developing for your use is a brief presentation that will help you tell the story of our industries. You can download the presentation and personalize it. Many local schools and community groups have opportunities for local businesses to come and share what they are doing. Not only are these ideal venues to tell our story, but they can also serve as a recruiting opportunity and may inspire the next generation to pursue careers in our industries. One of our best kept secrets is that there is an extremely wide range of jobs in the fuel and petrochemical industries and the salaries and benefits are very competitive.

Engage elected officials. Many companies have employee advocacy programs and we encourage you to get involved with them. Elected officials need to hear from industry employees to truly understand our industries and their impact. We need industry employees to be knowledgeable about our issues and where their local, state, and federal representatives stand on those issues. The AFPM website (www.afpm.org) is a good source of information on industry policy positions.

Share this guide.
Resources

Many more resources can be found on the AFPM EMpower website at https://empower.afpm.org. If you don’t see what you need there, there is a form to let us know what you need. Here are a few other sites to check out:

AFPM.org
Wemakeprogress.org
Imaginethat.org

Let us know how we can help. You can always reach a member of the EMpower team at empower@afpm.org