

How do we operate sustainably?

True to our word

As the world's population grows — by 2 billion people in the next 30 years, according to United Nations projections¹— more people will depend on our industries to enable access to mobility and critical, life-enhancing products. We recognize that this growth and increased demand makes our role in addressing issues like climate change and plastic waste ever more important. The people who work in America's fuel and petrochemical industries understand both the opportunity and the privilege of supporting this progress. Collectively, our member companies have invested billions of dollars to research, develop, and implement solutions that have improved our energy efficiency, reduced our environmental impact, and created cleaner fuels.

Emissions are down, while economic activity is up

From 2010 to 2018, the reported total U.S. carbon intensity (expressed as metric tons CO₂ equivalent per barrel of crude charged) of operating petroleum refineries has dropped by 12 percent.² And the increasing efficiency of U.S. petrochemical plants means lower emissions for each unit of plastic-building-block they produce. Despite a historic expansion in the petrochemical sector, EPA data shows only a slight uptick in carbon emissions in 2017.³

Transportation fuels are cleaner than ever

Our members have invested billions of dollars in research and development to make fuels as clean and efficient as possible. Our focus began with reducing sulfur in diesel fuel for land transportation. More recently, U.S. refiners have invested to bring the marine industry cleaner, lower-sulfur fuel — thereby reducing emissions from tankers, freighters, cruise ships and other commercial vessels and making global trade more sustainable. The production of lower-sulfur fuel is expected to result in a 77 percent reduction in sulfur dioxide emissions and nearly a 50 percent reduction in particulate matter emissions.⁴

Did you know?

AFPM members are pioneering new advances in advanced recycling processes to ultimately return plastics to their original monomers or building blocks. These building blocks can then be reformed into new products and molecularly recycled countless times, without quality or strength being compromised. This technology will enable society to successfully reuse the molecules of discarded packaging and other mixed plastics waste that might otherwise be sent to landfills.

¹ United Nations. <https://www.un.org/en/sections/issues-depth/population/>

² John Beath Environmental (2020)

³ U.S. Environmental Protection Agency

⁴ Energy & Environmental Research Associates. <https://americanenergysecurity.com/wp-content/uploads/2019/05/EERA-IMO2020-White-Paper.pdf>