Cars and trucks today are twice as efficient as vehicles from the 1970s. They are 99 percent cleaner for common pollutants, emit half the carbon, and are 75 percent more powerful. This is a testament to the ingenuity of auto manufacturers and fuel producers who have used lightweight advanced plastics, low-viscosity lubricants, and other technology to enhance fuel efficiency.

Any approach aimed at cutting greenhouse gas emissions needs to build on this progress and have a plan to tackle transportation-specific challenges that remain. America's refiners do. A nationwide 95 RON octane standard can deliver major carbon reductions in the nation's light-duty vehicle fleet faster and at a lower cost than any other proposal being considered by policymakers at the national level right now, especially policies seeking to force nationwide vehicle electrification.

The Octane Opportunity

Standardizing 95 RON high octane fuel for light-duty, gasoline-powered vehicles can make a huge difference for the environment and will help drivers go farther on each gallon of gas. A standard could be in place well before 2030, and **in year one alone**, the combination of the new high-octane fuel in optimized, higher compression engines would **reduce carbon emissions from light-duty cars and SUVs by 2.69 million metric tons and by 1.11 million metric tons for pickup trucks** — the equivalent emissions reduction of more than 700,000 electric vehicles, but at a fraction of the cost.

AFPM believes all vehicle technologies, including electric vehicles, will play an important role in the future of transportation, but consumer preference needs to be respected. Alongside refiner efforts to decarbonize heavy transportation through renewable diesel, a 95 RON octane standard can unlock an entirely new range of cleaner, fuel-efficient vehicle transportation options for consumers—options that include affordable, family-accommodating vehicles.

95 RON Details

- **What we're proposing:** A 95 RON octane standard throughout the United States that would require automakers to produce more fuel-efficient vehicles designed to run on cleaner, higher-octane gasoline. RON is the octane measure used globally and it's more efficient to produce and certify. 95 RON is roughly equivalent to 91-octane on the anti-knock index currently used in the United States. But unlike 91 premium fuel, 95 RON wouldn't be a niche product reserved just for luxury cars. It would be mass-produced and much more affordable.
- **How it would work:** A deadline would be set after which point all gasoline-powered vehicles sold in the United States would be manufactured to run on 95 RON high octane fuel, a fuel/vehicle design combination that will deliver better vehicle mileage and fewer tailpipe emissions. As these new cars hit the road, 95 RON fuel would be added to pumps alongside existing fuel options.
- **The advantage of octane:** Octane is how we reduce engine knock. In higher compression engines, higher octane fuel like 95 RON can increase fuel economy as well. A joint analysis conducted by AFPM and USCAR found that a 95 RON octane standard would increase fuel

efficiency by a much-needed 3-4 percent for new vehicles. While that may sound small, it’s not. It is a critical missing piece in the effort to improve fleetwide fuel economy now—without delay. And since ethanol is the best-priced source of octane in the world, a 95 RON standard would work for America’s farmers and renewable fuel producers as well as fuel refiners, retailers, and consumers.

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