



95 RON Octane Standard: A Smarter Way to Cut Carbon from Vehicles

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 other proposals being considered by policymakers.

A 95 RON standard would:

Ensure new cars are more fuel-efficient

Improve vehicle mileage

Cut carbon emissions

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 plastics, low-viscosity lubricants and other technologies to enhance fuel efficiency.

Standardizing 95 RON high octane fuel for light-duty, gasoline-powered vehicles can make a meaningful difference for the environment by empowering drivers to go farther on each gallon of gas.

Benefits of 95 RON:

National standard could be **in place well before 2030**

Year one carbon emissions reductions of 2.69 million metric tons (from light duty cars and trucks)

The same as putting 720,000 EVs on the road, but at a fraction of the cost for drivers and taxpayers

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.

What we're proposing

A national 95 RON octane standard would require automakers to produce more fuel-efficient vehicles designed to run on cleaner, higher-octane gasoline.

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 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

In higher compression engines, higher octane fuel like 95 RON can increase fuel economy. A joint analysis conducted by AFPM and USCAR found that a 95 RON octane standard would increase fuel efficiency by a much-needed 3-to-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 and cut carbon 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.