

Clean Octane Standard Coalition

Multi-Pollutant Emissions Standards for MY2027 and Later Light Duty Vehicles

The Environmental Protection Agency (EPA) is targeting [March of 2023](#) to issue a proposed rule setting multi-pollutant emissions standards for model year 2027 through at least MY 2030 vehicles, including GHG emission standards and updated standards for other criteria pollutants, with a final rule in 2024.

Clean Octane Standard Coalition

- Renewable Fuels Association
- National Farmers Union
- National Corn Growers Association

Solution: Set a federal minimum clean octane standard within, or in conjunction with, the proposal.

- Clean, high octane fuel from mid-level ethanol blends, used as a system with optimized engines, offers an essential pathway for achieving significant GHG and complementary criteria pollutant emission reductions from MY 2027 and later vehicles.
- Clean, high octane from higher ethanol blends helps achieve stricter GHG and criteria emission standards, cutting carbon emissions and reducing toxic aromatics to cut criteria emissions.
- Clean, high octane fuel offers consumers an affordable choice while also helping meet Biden Administration climate, air quality and environmental justice objectives.
- Clean, high octane fuel used as a system with optimized engines also offers an essential pathway for achieving more stringent fuel economy standards.

Benefits of a Clean Octane Pathway

- **Substantial reductions in greenhouse gas emissions** – not just from new vehicles, but from the existing fleet as well.
- **A fuel efficiency gain of up to 10 percent** in new cars at virtually no additional cost to either automakers or consumers.
- **Substantial benefits for public health** by reducing the particulate matter and air toxics emitted from gasoline by replacing the aromatic compounds refiners currently use to enhance octane.
- **Substantial environmental justice benefits** by reducing the disparate health impact of toxic emissions, particularly in densely populated urban areas.
- **Significantly reduce the demand for petroleum** and deliver **substantial economic benefits to consumers**, ensuring the rapid uptake of these blends.

Department of Energy Validation

The Department of Energy's [recently concluded Co-Optima research](#) validates the solution of pairing clean octane and optimized engines to deliver greater environmental and economic benefits on the pathway to a net-zero transportation future, and [DOE confirms ethanol's declining carbon intensity](#).

- New fuel options can improve fuel economy by 10 percent with today's turbocharged engines, with an additional 15 percent improvement with advanced engines.
- Domestically sourced bio-based fuels produce 60 percent fewer GHG emissions than petroleum-based fuels.
- Optimized fuel and engine combinations also cut criteria pollutant emissions.