

The Next Generation Fuels Act



Bill Summary

The Next Generation Fuels Act cleans up our nation's gasoline supply and transitions light duty vehicles to low carbon, high octane fuel use to reduce greenhouse gas emissions, improve air quality and increase fuel efficiency, all while supporting agriculture's contribution toward helping address climate change and decarbonizing transportation.

Low Carbon High Octane Fuels

- Requires automakers to use new 95 and 98 Research Octane Number, or RON, fuels to certify new vehicles for emission and fuel economy standards, beginning with model years 2026 and 2031, respectively.
 - RON is the measurement of gasoline properties related to how the fuel combusts in engines; today's regular gasoline is about 91 RON. The higher the RON, the more efficiently the engine uses energy.
 - Advanced engine design features are limited by current fuel. High octane fuels, such as 98 RON, allow automakers to meet stricter emission standards and improve vehicle fuel efficiency by 5 to 7 percent.
 - New 95 and 98 RON fuels would support mid-level ethanol blends like E20 and E30, supporting rural economies with increased demand for corn and biofuels.
- Requires octane sources used in the new fuels to result in at least 40 percent fewer greenhouse gas (GHG) emissions than unblended gasoline, lowering emissions compared to current market fuel. Establishes a clean octane standard by limiting the aromatic hydrocarbon content of all gasoline to an annual average of 17.5 percent by volume beginning in 2025.
 - Limiting aromatic hydrocarbons replaces toxic petroleum-based components with cleaner renewables like ethanol, which lowers tailpipe emissions to improve air quality and human health.

Vehicle Design/Warranty and Retail Fueling Infrastructure

- Requires automakers, beginning with the 2026 model year, to design and warrant vehicles for use with 95 RON fuel and ethanol blends up to 25 percent, increasing to 98 RON and up to 30 percent blends with model year 2031.
- Requires retailers and automakers to incorporate devices into fueling equipment and vehicles that ensure vehicle compatibility with the new fuels and prevent misfuelling. Requires all new refueling infrastructure to be compatible with higher ethanol blends effective January 1, 2024.
- Updates the CAFE/GHG weighting factor for flex fuel vehicles to 0.21, supporting production of more vehicles that run on low carbon alternative fuels like E85.

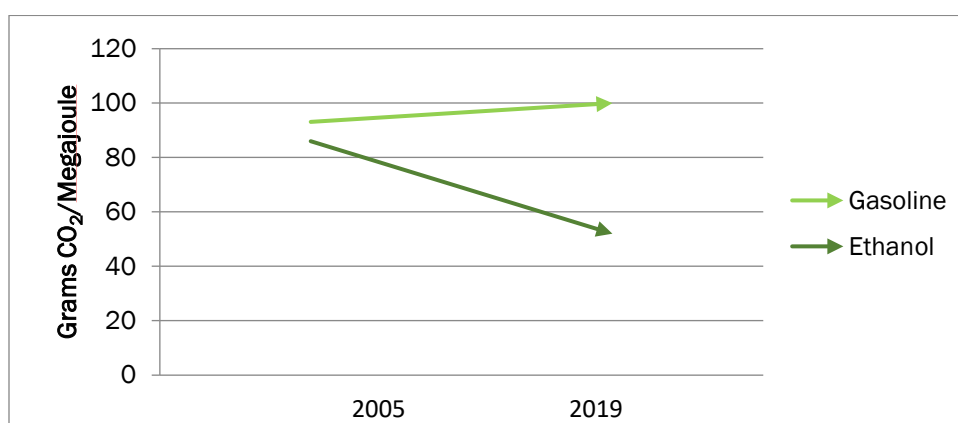
Regulatory Harmonization for Higher Ethanol Blends

- Removes unnecessary and outdated regulatory barriers preventing low carbon, high octane blends from entering the market by ensuring all ethanol blends greater than 10 percent receive the same Reid Vapor Pressure (RVP) treatment as 10 percent blends. This fix also resolves recent legal issues related to year-round sales of E15.
- Updates the R-Factor, part of the EPA formula used to calculate vehicle fuel efficiency, to 1.0 to support low carbon fuel use and reflect modern engines.
- Streamlines EPA approval of fuel blends with up to 30 percent ethanol to ensure cost-effective options to maximize carbon reduction are available to meet the new RON standards.
- Requires EPA to replace the flawed Motor Vehicle Emissions Simulator (MOVES) model with one that accurately represents real-world fuels and vehicles currently in the market.

Ethanol: A Low Carbon Fuel

- Ethanol significantly lowers carbon emissions and cleans the air.
- Ethanol makes vehicles more fuel efficient when used with advanced, optimized engines.
- Ethanol is a vital pathway for rural areas and agriculture to help address climate change.
- Ethanol is available now, at less cost for drivers.

The Department of Energy's Argonne National Laboratory shows ethanol's average carbon intensity is now 44 to 52 percent lower than gasoline's carbon intensity, and Argonne's most recent analysis has found that ethanol's carbon intensity has declined 23 percent since 2005. With continued voluntary, on-farm sustainability improvements, soil carbon sequestration and carbon capture technology, ethanol can reach net zero emissions.



Complements a Clean Fuel Standard

- Corn growers support market-based clean fuel policies that incentivize low carbon fuels like ethanol. The Next Generation Fuels Act would complement a federal Clean Fuel Standard, creating more space in every liquid fuel gallon for low carbon ethanol and advancing greater decarbonization per gallon.
- The Next Generation Fuels Act is an important step toward decarbonizing liquid fuel and would ensure low carbon liquid fuels are relevant, competitive, and affordable in the transition to low carbon transportation.

Low Carbon High Octane Benefits

- By getting more miles per gallon, increased fuel efficiency reduces emissions from transportation. Blending more low carbon ethanol further decreases GHG emissions and improves air quality to benefit our health.
 - With new low carbon, high octane fuel, automakers will be able to use advanced engine design features that improve vehicle fuel efficiency by 5 to 7 percent, supporting higher fuel economy standards.
 - The Next Generation Fuels Act requires that additives to increase fuel octane be at least 40 percent lower in GHG emissions than unblended gasoline, reducing GHG emissions with higher ethanol blending compared to today's standard 10 percent ethanol blend.
 - Pairing the low carbon requirement with a new cap on harmful hydrocarbon aromatics for all gasoline builds on the progress already made lowering tailpipe emissions by replacing the most toxic gasoline components with cleaner renewables and prevents backsliding with more fossil fuels.
- For farmers and rural communities, a low carbon, high octane fuel standard supports biofuel demand and enables biofuels to be a greater part of the solution to decarbonize transportation.