



Advanced Biofuels USA, a nonprofit educational organization, advocates for the adoption of advanced biofuels as an energy security, economic development, military flexibility and climate change solution.



EPA Tier 3 Proposed Regulations

A Common-Sense Change that Could Triple the Market Size for Biomass Ethanol and Other Advanced Biofuels

As part of the recently proposed Tier 3 motor vehicle fuel and emission regulations, www.epa.gov/otaq/tier3.htm, EPA included a very forward looking idea that could bring **higher octane, higher ethanol gasoline** to the marketplace.

Advanced Biofuels USA, as well as major vehicle manufacturers, fuel producers, and individuals nationwide enthusiastically support this idea.

However,

Advanced Biofuels USA, and many other supporters of this concept **recommend the following changes to assure consumers get maximum** fuel economy and climate change mitigation benefits from the EPA proposed higher octane, higher ethanol gasoline.

- Advance Biofuels USA fully supports EPA's recognition of the importance of **higher octane, higher ethanol (E-30) gasoline** as a **cost-effective way** to allow manufactures to maximize the efficiency of smaller, more efficient engines that utilize high combustion pressures to meet 2022 EPA CO₂ vehicle emission standards.
- To provide a smooth path to making this "higher octane, higher ethanol content gasoline" available nationwide, EPA Tier 3 regulations **should not require individual vehicle manufacturers to certify the availability of this fuel.** Instead, EPA should use their **authority under section 211 of the Clean Air Act to provide for the commercial availability of this "higher octane, higher ethanol content gasoline."**
- EPA should allow vehicle manufacturers that certify new vehicles with the "higher octane, higher ethanol content gasoline" to also certify that those vehicle are able to also operate on existing E-10 or E-15 fuels. These vehicles would be called **"E-30 capable."**

- By building up the number of these **“E-30 Capable”** vehicles *that could get the same mileage with a lower cost fuel*, the demand for E-30 would increase. This demand would create a nationwide E-30 infrastructure that would then allow for the marketing of **“E-30 Optimized”** Vehicles designed to *provide the fuel economy and GHG reductions necessary to meet 2022 CO₂ reduction standards*.
- EPA should also provide flexibility in the Tier 3 regulations so that other *renewable, negative GHG (as compared to petroleum) octane additives could be substituted for 30% ethanol when they are commercially available*. In order to qualify, these additives should have to meet the applicable EPA regulations for fuel composition, aromatic content, and certification testing. *This flexibility would promote competition in the biofuel marketplace that would result in the most sustainable low GHG solutions possible.*
- In order to provide equality in EPA fuel economy calculations for these fuels, *the “R” fuel energy content factor should be set at “1.”* This change is necessary since EPA has previously recognized that the *engine technology used to set the “R” in the 1970s has reached levels of efficiency not envisioned at the time* and as a result the factor does not represent the current reality.

By adopting a flexible, market-based Tier 3 **higher octane, higher ethanol content gasoline** program, EPA would **send a clear Demand Certainty Signal to markets** and fuel providers.

This clear signal will provide the currently missing certainty to financial markets so that they will provide the capital for total-biomass ethanol and other advanced biofuel refineries which will produce “higher octane, higher ethanol content” fuel.

This clear market signal would be the most effective way to meet EPA’s stated goal, to *“provide a market incentive to increase ethanol use beyond E10 and enhance the environmental performance of ethanol as a transportation fuel by using it to enable more fuel efficient engines.”*

For more information on Advanced Biofuels: www.advancedbiofuelsusa.org