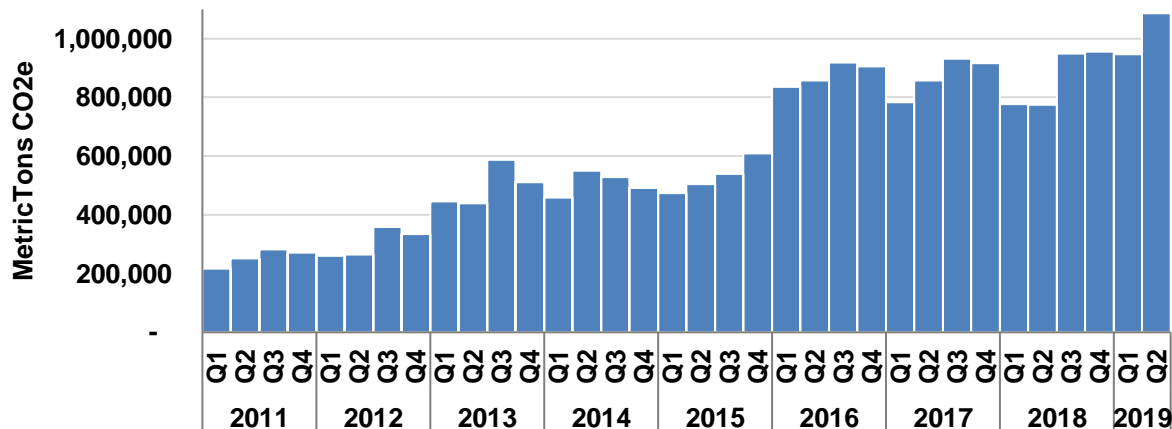


Ethanol plays an important role in achieving California's greenhouse gas reduction goals under the state's Low Carbon Fuels Standard.

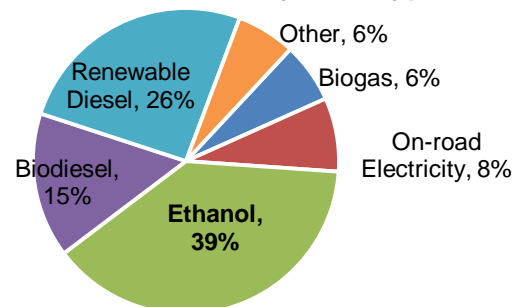
According to the **California Air Resources Board**, ethanol use is responsible for reducing greenhouse gas emissions from the California transportation sector by **20.9 million metric tons** from 2011-2018. That's equivalent to **removing 4.4 million cars from the road** for an entire year or eliminating the annual GHG emissions from **5 coal-fired power plants**.

California GHG Emissions Reductions Attributable to Ethanol Use Under the Low Carbon Fuel Standard

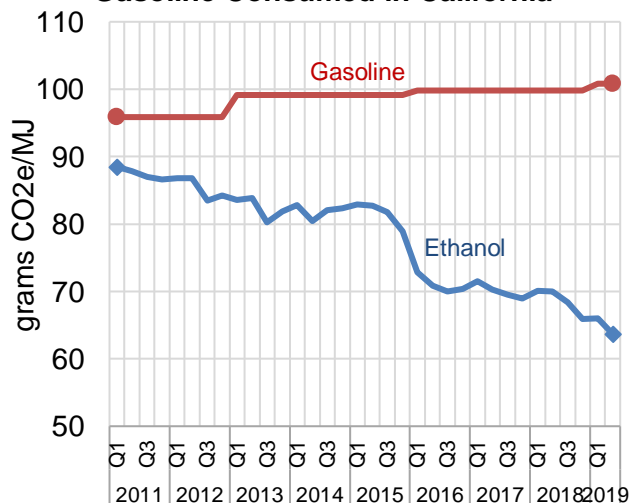


The California Air Resources Board says ethanol is responsible for **39% of the GHG reductions** achieved under the Low Carbon Fuel Standard since 2011—more than any other low carbon fuel. Meanwhile, on-road electric vehicles account for just 8% of GHG reductions.

GHG Reduction Achieved Under California LCFS, by Fuel Type



Carbon Intensity of Ethanol and Gasoline Consumed in California



Data from the California Air Resources Board show that every gallon of ethanol used in the state **reduces GHG emissions by 37%** compared to the gasoline it replaces (even with hypothetical land use change emissions). That's up from an 8% GHG reduction when the Low Carbon Fuel Standard started in 2011. While gasoline is getting dirtier, **ethanol's carbon footprint continues to shrink** due to the adoption of new technologies.