



June 14, 2017

The Honorable Kevin de León
President Pro Tempore
California State Senate
Sacramento, CA 95814

The Honorable Anthony Rendon
Speaker
California State Assembly
Sacramento, CA 95814

Re: STRONGLY OPPOSED: NEW DEFINITION FOR “NEAR-ZERO EMISSION TRUCK EQUIPMENT”

Dear President Pro Tempore de León and Speaker Rendon:

We understand there is an effort underway to include language in an upcoming trailer bill that would redefine “near-zero emission truck equipment” to exclude ultra-low emission natural gas trucks even when those trucks run on carbon negative biomethane, also sometimes called “renewable natural gas.”

We strongly oppose this revised definition and will fight hard to prevent its adoption. It contradicts:

- The state’s Short-Lived Climate Pollutant Strategy;
- The requirement of SB 1383 to divert 75% of organic landfill waste;
- The goals of reducing petroleum dependence and increasing renewable fuels.
- It would also prevent the state from addressing the single biggest source of air pollution in the San Joaquin and South Coast Air Districts, which is the pollution from heavy duty diesel powered trucks.

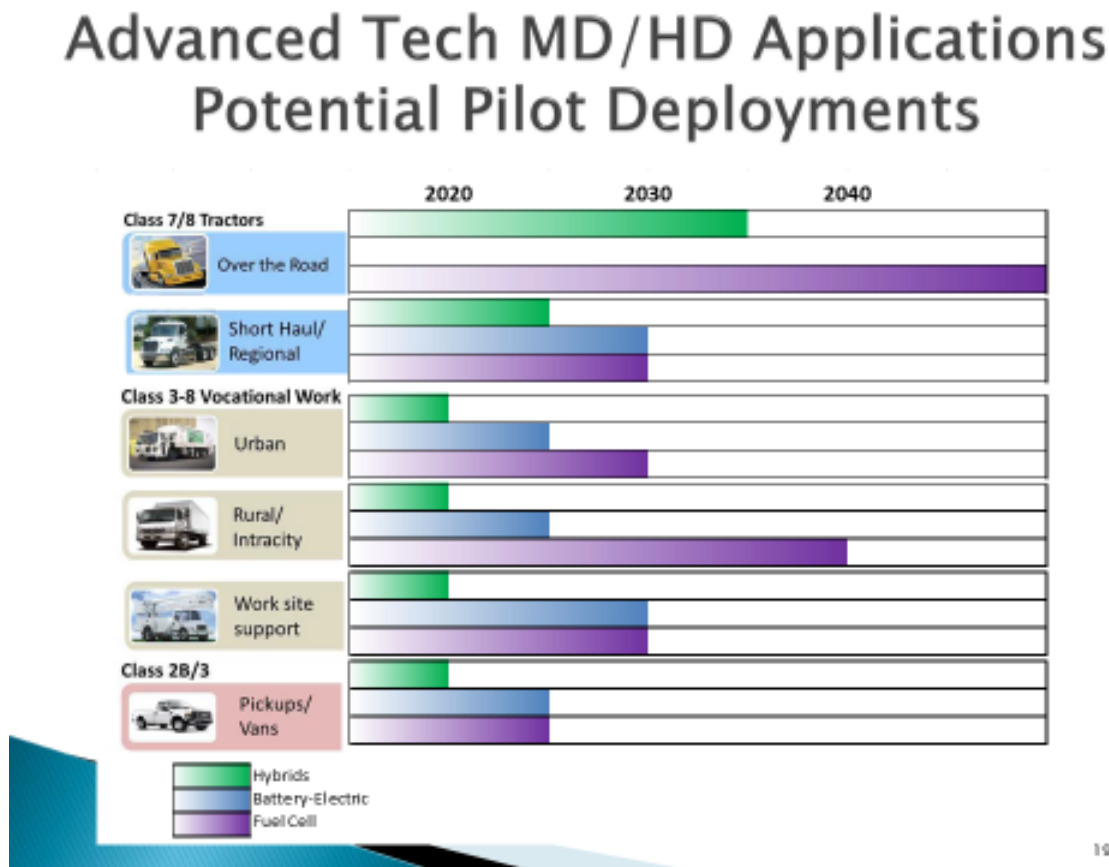
We want to make it categorically clear: this language is opposed in the strongest possible terms by the very industries that are providing clean air, environmental benefits, jobs and tax revenue to California.

The proposed language is harmful to our industries. Further, it is incongruous with existing California policies and investments. The largest source in California of NOx, GHG, and PM is from heavy duty trucks weighing 26,001 lbs. and more using diesel fuel. In the San Joaquin Valley Air District, heavy duty trucks cause half of all NOx and PM emissions. In the South Coast Air District, heavy duty trucks are the single largest source of NOx and PM. California can cut these emissions by more than 90 percent with ultra-low emission natural gas trucks, while helping to meet landfill diversion, dairy methane and other policies to cut Short-Lived Climate Pollutants.

Near-zero low-NOx engines set at the 0.02 g/bhp-hr standard, powered by conventional natural gas or biomethane, or a blend of the two, will achieve greater environmental benefits than any electrified system for 1/5th to 1/10th the cost and far fewer operational and logistical challenges, as natural gas technology can be seamlessly integrated into large natural gas fleet operations such as drayage, goods movement, refuse, transit, and airport operations. Near-zero emission trucks running on biomethane can achieve greater – sometimes 3 to 4 times greater – greenhouse gas reductions than Electric Vehicles (EVs). In addition, these engines help meet Short-lived Climate Pollutant reduction goals by reducing black carbon and methane, especially if ultra-low carbon renewable natural gas is used to fuel these engines.

Adopting this definition will also make it virtually impossible to meet the 2020 and 2030 Low Carbon Fuel Standard (LCFS) goals since more than 60% of current compliance is derived from biofuels -not electric vehicles. In fact, biomethane alone provides more carbon reductions under the LCFS program than electric vehicles. Shutting down California’s biofuels industries will make it impossible to meet the 2020 and 2030 targets for the LCFS, and for petroleum reduction more broadly.

Make no mistake: According to the below slide from the Air Resources Board’s (ARB) PowerPoint presentation on technology and fuels assessment, zero-emission technology in the heavy-duty sector will not be deployable until at least 2030, if not later. This applies to all known heavy-duty EV manufacturers, including those which have garnered recent media attention:

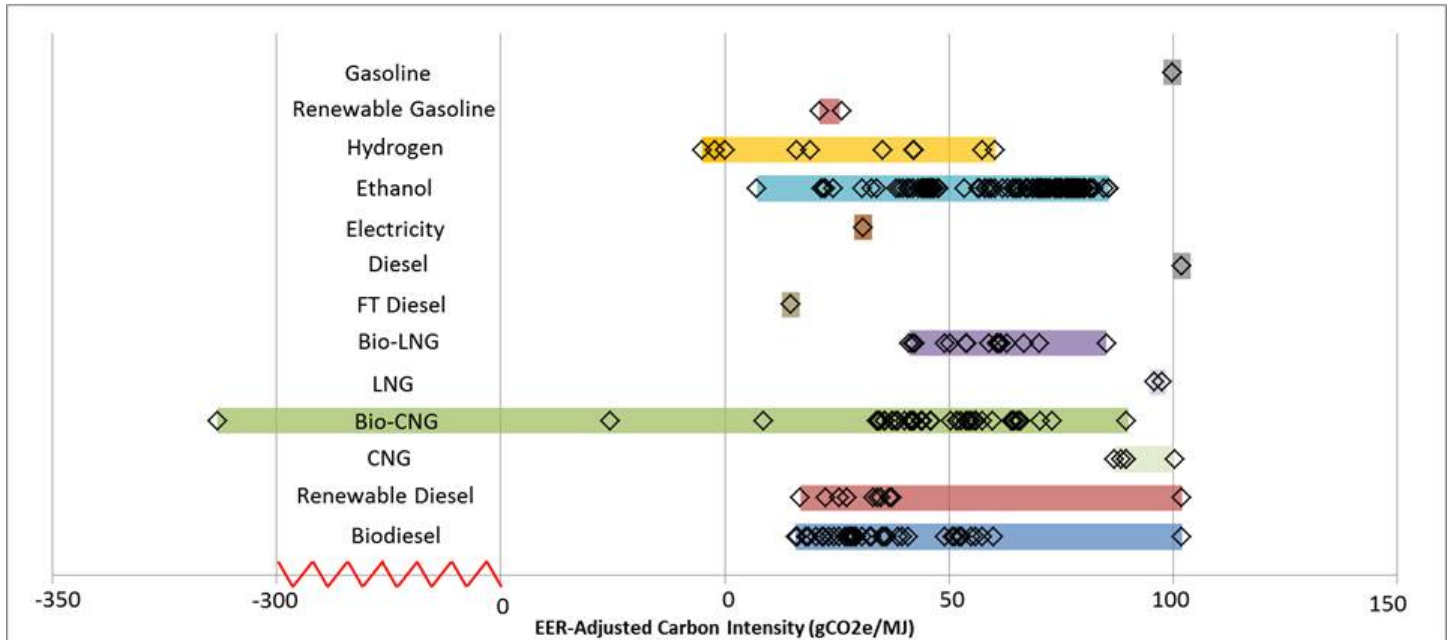


These technologies are not expected to enter the heavy-duty class 7 and 8 truck space for up to 35 years in some cases, while heavy-duty .02 NOx engines are already positively contributing to the state’s environmental, public health, carbon and petroleum reduction goals, especially in and around disadvantaged communities.

The ARB *Mobile Source Strategies Discussion Draft* specifically states on page 59, “Based on ARB staff’s technology assessment, **the most viable approach to meeting the 2031 and 2030 goals is low-NOx trucks.**” In other words, **the only technically feasible way to meet the 2031 federal 8-hour ozone standards and the state’s low carbon fuel and petroleum reduction goals is to deploy 900,000 low NOx trucks powered by 50% renewable fuel blends by 2031.** Biomethane is the lowest carbon-intensity transportation fuel available.

In addition, it is worth noting that battery and fuel cell vehicles are often referred to as “zero emission vehicles” (ZEV) but their capability of truly achieving zero emissions largely depends upon whether or not the vehicle’s power source (electricity) is emissions free. As the table below shows, an electric vehicle has a carbon intensity (CI) of approximately 39 gCO₂e/MJ, while “Bio CNG” (or Renewable Natural Gas) can have a CI of **negative** 315 gCO₂e/MJ!

Carbon Intensity Values of Current Certified Pathways (2016)



Last Updated 12/22/2016

Each marker represents an individual certified fuel pathway carbon intensity (CI), adjusted by the Energy Economy Ratio (EER). The length of each bar indicates the range of carbon intensity that may be achieved by a fuel pathway. The wide range of carbon intensities is due to the life cycle emissions methodology of the LCFS; variations in feedstock types, origin, raw material production, processing efficiencies, and transportation all contribute to an individual producer's fuel pathway CI. All valid CI values shown here are certified in 2016 including the legacy, Tier 1, Tier 2, and the Lookup Table.

¹ The alternative fuel's CI value is divided by its Energy Economy Ratio (EER) in order to obtain the EER-adjusted CI value, representing the emissions which occur from the alternative fuel per MJ of conventional fuel displaced.

Even with a 50 percent renewable portfolio by 2030, the state is still likely to draw at least half of its power from sources of energy that emit some form of emissions. Meanwhile, low-NO_x strategies combined with renewable fuels can demonstrate far superior emissions benefits for NO_x and GHG emissions today as neither are dependent upon the composition of the grid.

This proposed language is picking winners and losers. ARB supports near-zero emission vehicles as part of their strategy to improve air quality and meet the state's environmental goals. In fact, in a letter dated June 2, 2017 from ARB to the South Coast Air Quality Management District, they wrote, "The California Air Resources Board (CARB or the Board) believes NG vehicles operating on RNG are one of the key technologies in our efforts to improve ambient air quality and address climate change. The 0.02 g/bhp-hr NO_x engines are a significant advancement in engine technology, and California is counting on low-NO_x engines to meet our ambient air quality commitments."

The proposed trailer bill language would go against state policy and would send the **wrong signal to the biofuels and near-zero emissions vehicle marketplace as business decisions are made and investment certainty is imperative.**

We appreciate your consideration of our industries' collective concerns and ask that this proposed language be pulled immediately in no uncertain terms before the marketplace experiences a negative reaction.

Thank you,

Thomas Lawson, President-California Natural Gas Vehicle Coalition
Johannes D. Escudero, CEO & Executive Director-Coalition for Renewable Natural Gas
Todd Campbell, Vice President of Public Policy & Regulatory Affairs-Clean Energy

cc: The Honorable Cristina Garcia, Chair, Assembly Natural Resources Committee
The Honorable Jim Frazier, Chair, Assembly Transportation Committee
The Honorable Jim Beall, Chair, Senate Transportation and Housing Committee
The Honorable Holly Mitchell, Chair, Senate Budget Committee
The Honorable Phil Ting, Chair, Assembly Budget Committee