



September 22, 2021

Submitted via [Electronic Comments Docket](#)

Ms. Rajinder Sahota  
Deputy Executive Officer  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**RE: 2022 Scoping Plan Update Comments re: September 8, 2021  
Short – Lived Climate Pollutants Workshop**

Dear Ms. Sahota,

The California Natural Gas Vehicle Coalition (CNGVC) appreciates the opportunity to offer these comments in response to the Short-Lived Climate Pollutants (SLCP) Workshop held September 8, 2021. CNGVC is a diverse coalition of manufacturers, fleet operators, utilities, and fuel providers that promote the broader deployment of renewable natural gas (RNG)-powered, heavy-duty (HD) low NOx trucks as the best, most affordable solution to immediately reduce harmful, toxic emissions for a healthier future and restored environment.

Every year we see signs of our worsening climate crisis. Devastating wildfires, persistent droughts, unpredictable weather, and agricultural impacts all signal that the time is growing short to mitigate the permanent damage we have inflicted on our planet. Immediate substantial reductions in SLCPs, like black carbon, methane, and smog-forming pollution, are necessary to reverse this course. The ongoing climate crisis requires action today – not in the future – to prevent irreversible harm to the planet.

### **Displace Diesel with Low NOx Heavy-Duty RNG Trucks**

The best way to reduce SLCPs in the transportation sector is to reduce diesel use; diesel engines are a major source of black carbon and smog-forming pollution that are harmful to the environment and negatively affect public health. The Scoping Plan update must include a strategy that prioritizes the immediate displacement of HD diesel trucks with the cleanest technology commercially available – low-NOx HD trucks powered by RNG. Not only will this switch significantly reduce climate pollutants today, it also provides relief from criteria pollutants and air toxics like diesel particulate matter (DPM), nitrogen oxide (NOx), and ozone. Further, it provides the co-benefit of reducing methane emissions through the use of RNG. The benefits of RNG-fueled low-NOx trucks are undisputable:

- NOx emissions are reduced by 90%, or better, in comparison to the diesel trucks on the road today.
- DPM is reduced 100%.
- Low NOx trucks are 90% quieter than diesel trucks.
- Low NOx trucks are commercially available, proven and supported statewide by existing fueling infrastructure built out with private investments.
- RNG fuel reduces carbon emissions by up to 400%.
- RNG fuel has already fully penetrated the California market and is readily available.
- Low NOx trucks are affordable, costing less than half the cost of other clean technology.

In summary, low NOx trucks powered by RNG are available, more cost-effective, achieve greater SLCP and criteria pollutant reductions quicker, and for the least amount of public investment. And, because they exist today, can be deployed at scale, immediately while simultaneously providing a one-to-one replacement rate to the previously owned diesel. Every natural gas engine we can put on the road to reduce SCLP (i.e., consumes captured/renewable methane) and help meet our overall reduction goals is a win. Simply allowing diesel to be the default when cleaner technology is available is a missed opportunity that delays a healthier future.

### **Low NOx Trucks Are Also Carbon Negative**

Consistent with CARB's own data, low NOx trucks powered by RNG on average have negative carbon intensity (CI) values. And, because these vehicles reduce harmful climate pollutants and reverse the negative impacts to the environment, their use provides the best carbon emissions reductions compared to any other technology available today. Additionally, the carbon intensity for RNG in California continues to drop, which will support and drive the demand for low NOx HD trucks. In 2020, for the first time, RNG-powered trucks in California removed more carbon dioxide from the atmosphere than they emitted. And, the latest Low Carbon Fuel Standard data from Q1 2021 identified the CI of bio-CNG in California's system at -16.57 gCO<sub>2</sub>e/MJ<sup>1</sup>. It is predicted that by January 2024, California-produced RNG will have an average energy weighted CI of -101.74 gCO<sub>2</sub>e/MJ so that one natural gas truck fueled by California RNG will completely offset the GHG emissions of two diesel trucks<sup>2</sup>.

### **Private Capital Supports RNG Infrastructure**

The existing infrastructure supporting low NOx trucks fueled with RNG is robust and has been built out by the private sector using private capital. More than \$1 billion is being invested in infrastructure in California to produce large volumes of carbon negative RNG. Any future need for additional infrastructure will also be financially supported by the private sector. Therefore, this notion and concern about "stranded assets" relative to private capital is not only unnecessary but immaterial and distracts from the reality of the near-term environmental and health benefits of this technology. In comparison, ZE fueling and charging infrastructure will require substantial public investment from taxpayers, ratepayers, and other forms of public incentives. And, because there is no certainty on what type of ZE truck will be the right option for future needs – for example, is it hydrogen fuel cell ... or maybe battery electric – the risk of having "stranded assets" in these investments is much greater and warrants heightened focus.

Transitioning to carbon negative fuels today will result in immediate environmental improvements at a time when all the experts, research, and signs confirm that we are running out of time. We urge staff to prioritize near-term strategies in the Scoping Plan that quickly remove diesel trucks on the road and replace them with low NOx HD trucks powered by RNG – the cleanest technology available that is proven to significantly reduce SLCP and other toxic pollutants. Thank you and feel free to contact me if you have any questions regarding our position.

Respectfully,



Nicole Rice, President  
California Natural Gas Vehicle Coalition

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<sup>1</sup> [https://ngtnews.com/natural-gas-vehicle-industry-shifts-to-full-carbon-negative-future?utm\\_medium=email&utm\\_source=LNH+08-20-2021&utm\\_campaign=+Latest+News+Headlines](https://ngtnews.com/natural-gas-vehicle-industry-shifts-to-full-carbon-negative-future?utm_medium=email&utm_source=LNH+08-20-2021&utm_campaign=+Latest+News+Headlines)

<sup>2</sup> Gladstein Neandross & Associates, "An Assessment: California's In-State RNG Supply for Transportation 2020-2024," July 2020.