



April 1, 2022

Submitted via Electronic [Comments Docket](#)

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

RE: CNGVC Comments on the Initial Modeling Results Presented at the 2022 Scoping Plan Update Workshop – March 15, 2022

Dear Ms. Sahota,

The California Natural Gas Vehicle Coalition (CNGVC) respectfully submits the following comments on the March 15th Initial Modeling Results Workshop for the 2022 Scoping Plan Update.

CNGVC is a coalition of natural gas vehicle and engine manufacturers, utilities, fuel providers and fleet operators, who support the inclusion of heavy-duty (HD) low NO_x trucks¹ fueled by renewable natural gas (RNG) in the State's clean transportation strategy. This technology, which was commercialized with significant support from CARB, is immediately available, cost effective and achieves immediate, significant reductions in short-lived climate and criteria pollutants. Further, RNG use in the transportation sector currently has a negative carbon intensity, as confirmed by the Low Carbon Fuel Standard (LCFS) public data. Simply stated, RNG-fueled HD trucks are helping California reach its carbon neutrality goals today.

AB 32 requires the state Air Resources Board (CARB) to develop a Scoping Plan that prioritizes cost-effectiveness and technological feasibility in striving for the 2030 statutory GHG emission reduction target. Of the scenarios modeled, this charge seems most reasonably achieved through the adoption of Alternative 3. This option provides a diverse and proportional mix of clean transportation fuel uses in the initial stages of the transition while waiting for other technologies like zero-emission trucks (ZEV) and Hydrogen to increase commercially and improve performance. And, when replacing the use of traditional diesel in the early years with increased deployment of RNG-fueled HD trucks, Alternative 3 offers the most practical option to sustainable GHG reductions. Additionally, Alternative 3 gives the state the time needed to make the transition sustainable whereas Alternatives 1 and 2 present too short of a timeline.

¹ "Low NO_x trucks" means those that are powered by renewable natural gas and meet a .02 optional certification standard today and the Omnibus standard beginning in 2027

Both Alternatives 3 and 4 focus on 2045, which CNGVC supports because it gives the needed time for HD ZEV technology to mature, infrastructure to be developed and the implementation to be done right, without sacrificing the emission reductions that can be achieved today with existing commercial clean technology. However, Alternative 4 presents the least aggressive scenario. Therefore, Alternative 3 appears to be the most promising option, but more information is needed to fully understand the perceived benefits and impacts.

We offer the following additional comments as further support for our position:

Cost Effectiveness

Alternative 3 (and arguably Alternative 4) is a more cost-effective option because of the increased deployment of medium- and heavy-duty (MDH) low NOx trucks during the initial years of the transition. Whereas Alternatives 1 and 2 are projected to cost billions of dollars to turn over just a portion of the MHD vehicles needed, Alternative 3 proposes to provide a more gradual conversion that allows for diesel to be displaced with technology options, including RNG-fueled low NOx HD trucks, thereby resulting in greater and continual reduction in climate and criteria air pollutants. Additionally, the low NOx HD truck fueling network requires no additional public investments because the infrastructure is funded by private investments.

Carbon Neutrality

Combining Alternative 3 with greater RNG use in the transportation sector can help California reach carbon neutrality sooner, in comparison to Alternatives 1 and 2. According to recent LCFS data, as of third-quarter 2021 the average carbon intensity of ALL the natural gas reported in the program is negative (-28.17 gCO₂e/MJ), making California's low NOx trucks the only carbon-negative transportation option today². With RNG comprising 90 percent of the natural gas used in the transportation sector, deploying more carbon-negative HD low NOx trucks is the fastest way for California to immediately reduce its climate impacts. The state won't need to expend as much of its limited capital resources to create or use carbon dioxide removal techniques, as indicated on E3 Slide 8. Low NOx trucks are California's immediate carbon reduction solution.

Near Term Emission Reductions


As illustrated on E3 Slide 9, Alternative 3 (as well as Alternative 4) produce less transportation-related emissions. But, the emissions produced under Alternative 3 can be offset and/or significantly reduced through the greater use of HD low NOx trucks, which are 90% cleaner than their diesel counterpart. **The highest and best use of biomethane is in trucks until they can be widely electrified at scale.** Any potential for continued use of traditional diesel for on-road HD truck use should be substituted with renewable fuels.

Further, a greater use of carbon net negative RNG-powered HD trucks addresses the concern raised by E3 regarding the persistence of agriculture and methane emissions throughout all the Alternatives. Capturing fugitive methane emissions for use in the transportation sector will significantly decrease the natural release and flaring of those harmful pollutants into the atmosphere. Combined, these two actions could result in an even better outcome in Alternative 3 than envisioned under Alternatives 1 and 2 for both 2035 and 2045, confirming that RNG-powered HD trucks are the right emissions reduction solution both for today and tomorrow.

² <https://cngvp.org/wp-content/uploads/2022/02/CARB-Data-Fact-Sheet-FINAL.pdf>

When considering all the options presented, Alternative 3 offers the most practical, feasible and cost-effective option to sustainable GHG reductions. Thank you for the opportunity for CNGVC to provide comments. Feel free to reach out to me at nicolerice@cngvc.org if you have any questions regarding our position.

Respectfully,

A handwritten signature in black ink that reads "Nicole Rice". The signature is written in a cursive style with a large initial "N".

President
California Natural Gas Vehicle Coalition

cc: CARB Board Members
Ms. Lauren Sanchez, Senior Advisor for Climate, Office of the Governor
Ms. Hazel Miranda, Deputy Legislative Secretary, Office of the Governor