



December 21, 2022

**VIA ONLINE SUBMISSION**

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

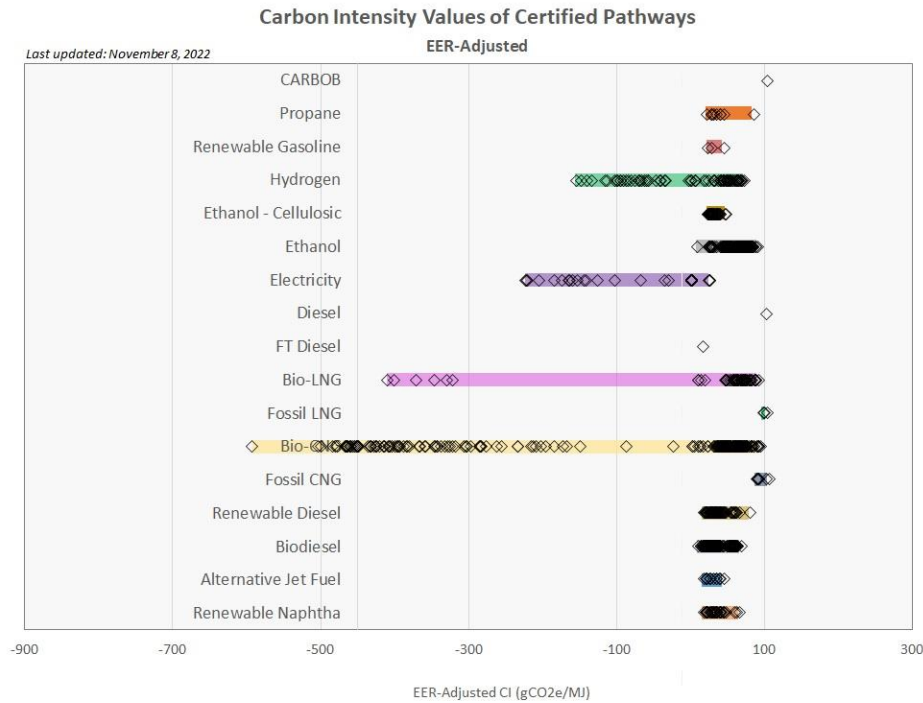
**RE: Low Carbon Fuel Standard – November Workshop:**

AmeriGas Propane L.P. (AmeriGas) is honored to have the opportunity to offer its comments to the California Air Resources Board (CARB) related to the November 9, 2022, Low Carbon Fuel Standard Public Workshop: Concepts and Tools for Compliance Target Modeling. AmeriGas supports the decarbonization efforts of the State of California through the implementation of the proposed California Transportation Supply (CATS) Model “Alternative A” but only with the inclusion of Fossil Propane, Renewable Propane, and blends as permissible Low-Carbon Fuel Pathways.

AmeriGas is the largest propane retailer in the United States based on the volume of propane gallons distributed annually, serving nearly 1.3 million customers in all fifty states from approximately 1,400 propane distribution locations by approximately 4,700 employees nationwide. In California, AmeriGas serves approximately 110,000 Customers from 40 retail locations, where roughly 168 employees deliver more than 80 million gallons of propane every year. Approximately 15 million of these 80 million gallons are utilized directly in the transportation sector.

AmeriGas is a subsidiary of UGI Corporation, a diversified global energy provider. UGI Corporation is a distributor and marketer of energy products and services, including natural gas, propane, butane electricity and renewable energy solutions and has been providing energy to consumers for over 140 years.

AmeriGas strongly supports the decarbonization efforts of the State of California through the LCFS program. We believe that “Alternative A” as presented during the November 9th workshop is the most practical alternative design option. This alternative continues to encourage investments and innovation to take place in the near-term, which will create a more vibrant and healthy energy sector, while still meeting the 90 percent reduction target by 2045. What is missing from this alternative as presented however, is the recognition of propane as a low carbon alternative fuel and key participant in the solution. Fossil natural gas is currently listed as an acceptable pathway within the CATS Model, yet propane, a certified fuel pathway with an identical Carbon Intensity (CI), appears to have been omitted from the acceptable product listing. These CI values were last updated by CARB on November 8, 2022, on the LCFS Pathway Certified Carbon Intensities web page and show the value of propane as a viable and beneficial fuel in the decarbonization mission at least equal to natural gas and far superior to liquid refined fossil fuels. A copy of the values published by CARB is included here:



AmeriGas and UGI Corporation are committed to making renewables a focal point of our future. To show this commitment UGI Corporation has and is continuing to make reliable renewable energy its investment priority. This includes \$1 to 1.25 billion in projected investment in renewable energy solutions from FY 2021 through 2025 of which \$300 million has already been committed to renewable and decarbonizing projects.

AmeriGas is at the forefront of bringing California-produced renewable propane to market, with the expectation that we will be delivering this low CI solution to market in the second quarter of 2023. AmeriGas believes the CARB can achieve the tenets of recent decarbonization legislation as well as Governor Newsom’s directive by ensuring the LCFS supports a wide variety of low- and zero-carbon fuels.

Renewable propane is a non-methane, extremely versatile energy molecule. It retains all the same eco-friendly characteristics (e.g., clean burning, non-toxic) as the conventional molecule, but with a lower CI. Renewable propane is already being consumed in California on a relatively small scale with a CI score close to 20, which is much lower than many alternatives. AmeriGas plans to significantly increase the availability and usage of renewable propane in California in 2023 which will provide a significant carbon reduction to the 220 million gallons<sup>1</sup> used in the state each year.

AmeriGas believes the LCFS CATS Model does not adequately reflect the reality of low-carbon fuel adoption by excluding propane, renewable propane and blends. As published on the

<sup>1</sup> Western Propane Association: <https://www.usecaliforniapropane.com/>

Department of Energy's EERE Alternative Fuels Data Center, "Argonne National Laboratory's [Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation \(GREET\) model](#) estimates the life cycle petroleum use and GHG emissions for multiple fuels. When this model is used to evaluate vehicles running on propane, it indicates that propane use reduces GHG emissions by nearly 13%, and when derived as a by-product of natural gas production, propane reduces petroleum use by 99%. The Gas Technology Institute compared GHG emissions from forklifts, buses, and light- and medium-duty vehicles operating on various fuels in [GHG and Criteria Pollutant Emissions Analysis\(PDF\)](#)." <sup>2</sup> Further information shows that when derived as a by-product of renewable diesel production, **propane reduces petroleum GHG emissions by over 70%**.<sup>3</sup> By not including propane in the CATS model, CARB is omitting important data that would help in the development of potential fuel markets, fuel supply optimization and assist in minimizing the cost of this fuel to consumers.

Consumers are highly sensitive to fuel costs. Because propane is a multimarket fuel - serving every sector of the California economy - aggressive early adoption timelines suggested by some models would result in significant cost impacts to consumers. The more than 4,000 commercial motor fuel consumers that AmeriGas supplies are impacted by high fuel costs while trying to remain competitive in this California market, and propane can provide an option to increase sustainability while retaining their current infrastructure and equipment.

AmeriGas remains a committed partner in the decarbonization efforts of the State of California. We believe that "Alternative A" is the correct pathway to achieving California's decarbonization targets. We encourage CARB to recognize propane, renewable propane, and blends in the LCFS-eligible fuel pathways. We strongly believe that decarbonization, energy security and resilience is best achieved through multiple approaches, which tackle the broadest range of fuel-use, not only a singular one.

Thank you for the opportunity to comment on these important components of a successful LCFS program in California. AmeriGas will request a meeting to further discuss how we can support the addition of renewable propane in the CATS model.

Sincerely,



Casandra Russo  
Manager of Government and Industry Affairs  
AmeriGas Propane L.P.

---

<sup>2</sup> [https://afdc.energy.gov/vehicles/propane\\_emissions.html](https://afdc.energy.gov/vehicles/propane_emissions.html)

<sup>3</sup> <https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities> [ww2.arb.ca.gov]