

**July 23, 2018**

California Air Resources Board, Mobile Source Control Division

Attn: Jack Kitowski, Division Chief

P.O. Box 2815  Sacramento, CA 95812

**RE: Innovative Clean Transit Regulation Staff Proposal**

Dear Mr. Kitowski,

The Coalition for Renewable Natural Gas (RNG Coalition) thanks you for the opportunity to participate in the June 13, 2018 Regulatory Workshop and to provide written feedback on the Innovative Clean Transit (ICT) [Draft Proposed Regulation Summary](https://www.arb.ca.gov/msprog/ict/meeting/mt180611/180611ictregsummary.pdf). We appreciate the goal of Air Resources Board (ARB) staff to improve the environmental performance of California’s transit sector as measured by its contribution to emissions of greenhouse gases and air pollution statewide. We also appreciate the goals of the ICT Proposed Regulation and its accompanying summary to achieve air quality, climate, and public health goals, and to increase clean, affordable transportation options. However, we believe that an exclusive commitment to transportation vehicle technologies with zero-emissions at the vehicle source (while prohibiting use of vehicle technologies that have very near-zero emission engine technologies and renewable fuel) is neither necessary to meet those goals nor the most efficient means of doing so.

**Who We Are**

The RNG Coalition is a non-profit organization based in California that represents and provides public policy advocacy on behalf of the renewable natural gas (RNG, biomethane, upgraded biogas) industry in North America. Our membership is comprised of leading companies operating in each sector of the industry, including but not limited to producers of greater than 90% of all the RNG produced in the United States and Canada.

**Contrary to CARB’s Assertion, a Zero-Emission Mandate is Not Necessary to Meet State Goals**

The RNG Coalition disagrees with the assertion made by CARB that: “Achieving California’s long-term goals will require…a transition from conventional combustion technologies to zero-emission technology everywhere feasible and near-zero emission powered by low-carbon renewable fuels everywhere else.” [[1]](#footnote-1) We disagree because a transition to zero-emission technology everywhere feasible is not only unnecessary to meet our-long term goals, it is in some cases not the most effective or efficient manner of achieving those goals. The long-term goals identified by CARB in the workshop notice are “air quality, climate, and public health goals” that will be met while “providing transit agencies the flexibility to continue meeting expanding needs for effective, efficient, and affordable regional transit services across California.”

**A transition to zero-emission technology is not necessary to meet the state’s air quality goals.**

Data shows that an ultra-low emission bus fueled by RNG is as clean as an electric bus when it comes to meeting air quality standards. According to a 2017 study by the state’s own University of California Riverside, ultra-low emission heavy-duty natural gas engines fueled by RNG test more than 99.8 percent clean.[[2]](#footnote-2) This scientific study indicates that the two technologies should be treated as equally desirable options under a regulation designed to help meet air quality standards. This is critical when we also consider CARB’s co-equal goal of enabling transit agencies to continue providing affordable regional transit services, as ultra-low emission buses are significantly lower in cost than electric buses.

**Likewise, a transition to zero-emission technology is also not necessary to meet the state’s climate change goals**. In fact, a transition to zero emission technology would not be the most efficient or effective way to meet the state’s carbon emissions reduction goals, but rather would contradictorily impede California’s ability to meet the state’s methane reduction goal encoded by the Legislature.

CARB data shows that renewable natural gas is the lowest carbon fuel available. While grid electricity used for electric vehicles has a carbon intensity of 35, RNG scores as low as -272.[[3]](#footnote-3) Today, less than half of California’s electricity needs are met with renewables. Even under the scenario in which 100 percent of electricity used as transportation fuel were certified solar or wind power, the lowest possible carbon intensity would be zero. Clearly, on a lifecycle basis (i.e. when you consider all emissions), natural gas buses fueled by renewable natural gas thus contribute more to meeting the state’s climate change goals than electric busses.

In addition, with the passage of SB 1383, California has committed to an additional climate change goal to reduce methane emissions by 40% by 2030. The use of RNG in transit buses has and will continue to create a market for the capture and beneficial use of methane. Methane generation from the decomposition of organic material will always occur, because natural human and animal waste streams will always contain organic material. Methane in California’s waste sectors can be emitted into our air, can be flared off to no beneficial end use, or can be captured, cleaned and used as a sustainable fuel in the form of RNG. Eliminating renewable natural gas from an end-use as renewable fuel in the transportation sector – which currently is the largest market in California for the beneficial use of captured methane – would be counter-productive to meeting the state’s climate goal with respect to methane.

**Finally, a transition to zero-emission technology is not necessary to meet the state’s climate public health goals.** As aforementioned, data has shown that an ultra-low emission bus fueled by RNG is as clean as an electric bus when it comes to meeting air quality standards. Therefore, there would be no discernable difference in beneficial public health outcomes that matter to California policy-makers such as fewer cases of asthma, lung disease and premature death due to the use of ultra-low emission buses fueled by RNG as opposed to electric buses. When you add in the upstream local co-benefits of RNG production facilities, beneficial public health outcomes would be even greater with the use of ultra-low emission bus fueled by RNG.

**Commitment to Life-Cycle Environmental Impact Analysis Remains Unfulfilled**

CARB staff made a commitment at the December 15th ICT workshop to conduct a robust lifecycle environmental impact analysis. This commitment was made in response to a concern shared by stakeholders of the RNG industry at the workshop and in corresponding comments that the proposed regulation compartmentalized vehicle emissions by considering only tailpipe emissions – a compartmentalization that would lead to cross-sectoral emissions leakage from the transportation sector to the power sector. As of the date of this writing, California’s grid is only 29% renewable. There is no guarantee that there will be any more than 50 percent of electricity in California coming from renewables, and there remain as yet unresolved infrastructure and storage concerns that may limit the state’s renewables capacity in the next few decades.

Depending on when and how California’s transit buses are powered, the ICT proposal has the potential to lead to a net increase in emissions. The emissions that impact disadvantaged communities along transit corridors would simply shift geographically to impose harm on the disadvantaged communities who live near the power plants fueling those “zero-emissions” vehicles. Comments from the South Coast Air Quality Management District at the December 15 workshop further underscored that these emissions are real and should not be ignored.

It is therefore in California’s best interest for CARB to meet its commitment made at the December 15th workshop to conduct a robust environmental analysis of the proposed ICT regulation that includes: 1) the cross-sectoral lifecycle emissions leakage resulting from additional electricity demand from zero-emissions vehicles; 2) the nature of and extent to which these emissions will impact disadvantaged communities; and 3) the comparative lifecycle emissions from alternatively-fueled near-zero vehicles.

**Alternatives Analysis Needed**

The RNG Coalition believes that this regulation, as proposed, will legally constitute a “major regulation” under the Administrative Procedures Act as specified by SB 617(Calderon)[Chapter 493, Statutes of 2011] and, as such, would trigger the requirement for the applicable regulatory agency to ultimately prepare a specified regulatory impact assessment. In light of this, we urge CARB to consider regulatory alternatives that would be more cost-effective to The State’s economy and to affected private persons that would be equally effective in implementing the statutory policy.

**Benefits of RNG**

In agreement with the desired outcomes of the ICT Regulation, we believe that the transit sector provides California with an excellent opportunity to reduce greenhouse gas emissions from transportation fuel sources. The State can do so while simultaneously reducing our country’s dependence on foreign oil by creating demand for clean, domestic and renewable transportation fuel. Utilization of RNG provides further benefits in terms of helping California meet additional policy goals by capturing and converting for productive end-use methane that would otherwise be flared (combusted and wasted) or worse, escape fugitively into the atmosphere as a highly potent short-lived climate pollutant from dairies, wastewater treatment and anaerobic digestion facilities, and landfills. The development of RNG production facilities foster improved management of waste streams, reduce soil and water impacts and stimulate California’s clean energy economy.

**Conclusion**

The Coalition for Renewable Natural Gas acknowledges the hard work and due diligence CARB staff has demonstrated in drafting the Innovative Clean Transit (ICT) [Draft Proposed Regulation Summary](https://www.arb.ca.gov/msprog/ict/meeting/mt180611/180611ictregsummary.pdf). We look forward to continuing to partner with the California Air Resources Board to ensure that The State’s transit sector meets its full potential in contributing to fulfillment of California’s environmental goals.

Please do not hesitate to contact me directly with any questions or concerns.

Sincerely,

Nina Kapoor

Director of State Government Affairs

Coalition for Renewable Natural Gas

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cc: Alice Reynolds , Senior Advisor to the Governor for Climate, Environment and Energy

 Tony Brasil, Branch Chief, Heavy Duty Diesel Implementation Branch

 Shirin Barfjani, Lead Staff, Innovative Clean Transit Regulation

1. <https://www.arb.ca.gov/msprog/mailouts/msc1815/msc1815.pdf>, Page 2 [↑](#footnote-ref-1)
2. <https://ucrtoday.ucr.edu/48342> [↑](#footnote-ref-2)
3. <https://www.arb.ca.gov/fuels/lcfs/fuelpathways/pathwaytable.htm> [↑](#footnote-ref-3)