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RNG Coalition Comments on April 8, 2019 Joint CPUC/CEC Workshop on Building Decarbonization

Attached please find our comments on the workshop and prior relevant comments submitted in the PUC docket.

Additional submitted attachment is included below.



April 22, 2019

RE: Comments on April 8, 2019 Joint CPUC/CEC Workshop on Building Decarbonization

To Whom It May Concern:

I. Introduction

The Coalition for Renewable Natural Gas (RNG Coalition) is a California-based nonprofit organization representing and providing public policy advocacy and education for the Renewable Natural Gas (RNG or biogas-derived biomethane) industry. We advocate for the increased development, deployment and utilization of RNG, and availability of domestic, renewable, clean fuel and energy in California and across North America. The RNG Coalition respectfully submits these comments in response to the Joint California Public Utilities Commission (CPUC) and California Energy Commission (CEC) Workshop on Building Decarbonization held on April 8, 2019 (the Workshop).

In these comments we reemphasize that our goal is not to oppose other alternatives that may help to accomplish the changes in buildings needed to meet the State's ambitious climate goals, only to advocate for a balanced portfolio of solutions that is inclusive of additional opportunities for RNG. The RNG industry does not claim to be able to solve the daunting challenge of completely decarbonizing all existing natural gas infrastructure across all end-use applications alone, but we know that RNG can, and should, be a significant contributor to this effort.

We limit our remarks in this document to responding to the RNG-related portions of the Workshop. As requested by CEC Staff, we also include our prior CPUC filings on these issues in this submission to the CEC docket.¹ Please see these filings for additional details about how RNG can be helpful in building decarbonization.

¹ Our prior comments are available at the following links:
<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M273/K147/273147188.PDF> and
<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M276/K978/276978150.PDF>

II. To be Successful in Building Decarbonization We Need to Move Quickly Past Rhetoric to Develop a Balanced Portfolio of Decarbonization Technologies

We were encouraged by discussions early in the Workshop agenda around all options for building decarbonization, but left feeling that the emotionally-charged debate in the second half of the day left very little room for important dialogue about effective policy design. We agree with the presentation by Mr. Heriberto Rosales, of the CEC staff, that recognized RNG specifically as part of a balanced portfolio of options to decarbonize buildings.² California has established other successful policy portfolios that promote the simultaneous use of low carbon fuels and efficiency improvements (and electrification where appropriate).³ Unfortunately, none of the remaining panels later in the day addressed the clear need for additional dialogue about policies to promote RNG.

This is in contrast to other forums that have recognized the importance of RNG in California. The California Air Resources Board's (CARB) 2017 Greenhouse Gas Scoping Plan stated that, "reducing demand for natural gas, *and moving toward renewable natural gas*, will help California achieve its 2030 climate target."⁴ The California Energy Commission (CEC), in the Final 2017 Integrated Energy Policy Report, recommended that "the CPUC should continue to *evaluate methods to promote increased use of renewable gas*."⁵ Mr. George Minter's presentation from Southern California Gas Company (SoCalGas) highlighted these state efforts to employ the RNG resource to meet our near-term (2030) methane reduction goals.⁶ He correctly pointed out that both the Short-lived Climate Pollutant (SLCP) Reduction

² [Building Decarbonization: Regulatory and Policy Overview](#), Heriberto Rosales, California Energy Commission, slide 7. Unfortunately, Mr. Rosales also orally referred to RNG as "more of a potential pathway...not really a viable option for buildings right now," without providing additional detail as to the basis of such a statement or exploration of what other policy mechanisms could be put in place to make RNG use in buildings more viable (minute 42 of the webinar recording).

³ For example in the transport sector, the [Low-Emission Vehicle GHG](#) standards promote efficiency, the [Zero-Emission Vehicle Program](#) promotes electrification, and the [Low Carbon Fuel Standard](#) promotes alternative fuel use. In the electric sector, we have building and appliance efficiency standards and incentive programs and the [Renewables Portfolio Standard](#). A glaring area missing in our portfolio of policies is a program to decarbonize gaseous fuels.

⁴ 2017 Scoping Plan page ES11, emphasis added.

⁵ 2017 IEPR, page 286, emphasis added.

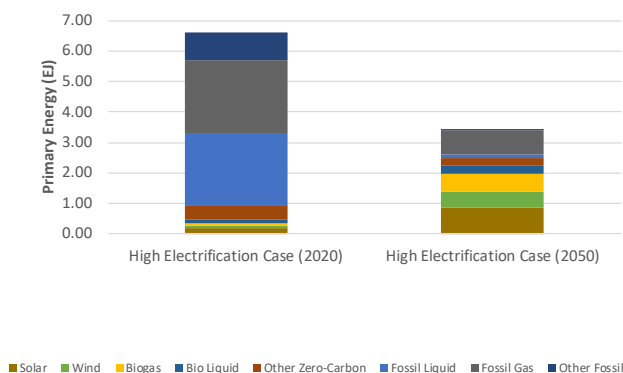
⁶ [A Sustainable Energy Future for all Californians](#), George Minter, SoCalGas, Slides 3-6.

Plan and the Scoping Plan both rely heavily on methane reductions and the use of RNG to reach both near- and long-term climate goals.⁷

III. The Workshop Hinted at the Complementary Nature of RNG Adoption and Building Electrification

We believe the lack of attention at the Workshop to RNG is possibly due to a misinterpretation of the work done by the consulting firm Energy and Environmental Economics (E3) for the CEC entitled *Deep Decarbonization in a High Renewables Future*.⁸ Many stakeholders seem to have embraced this report, but some only acknowledge a subset of the key findings—such as the fact that building electrification offers potential benefits—without looking holistically at all technologies deployed to reach deep decarbonization in the report, which also includes a strong role for RNG.

Figure 1. E3's Work Shows High RNG Penetration in Tandem with High Electrification



For example, Mr. Panama Bartholomy referred to the biogas supply curve used in the E3 study, and orally interpreted it to mean that the costs of using the majority of the supply of RNG in that curve would be unacceptable.⁹ Yet, E3's work predicts that **the majority of RNG in that supply curve is used** in order to hit the states GHG reduction goals. In fact, E3 shows the highest amount of biogas used in 2050 in the high electrification case (0.59 Exajoules in 2050, see Figure 1).¹⁰

⁷ The SLCP Reduction Plan is here: <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>

The 2017 Scoping Plan is here: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

⁸ <https://www.ethree.com/projects/deep-decarbonization-california-cec/>

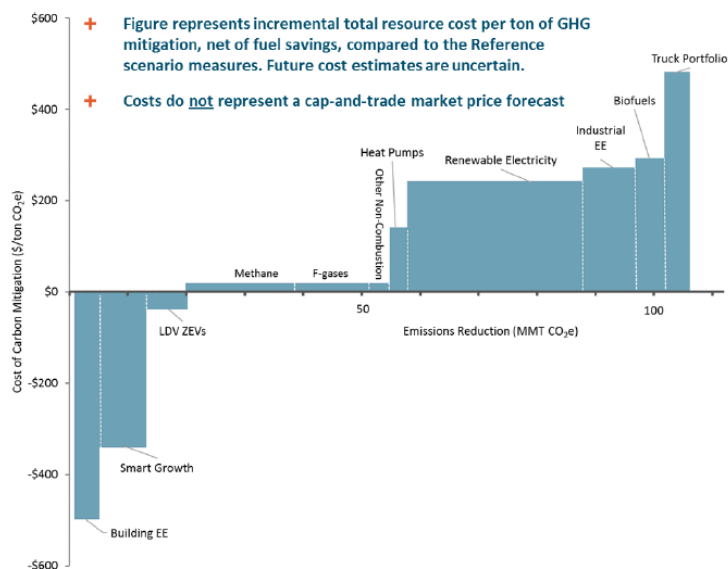
⁹ *It's Time for Our Buildings to Match our Ambitions*, Panama Bartholomy, Building Decarbonization Coalition, Slide 20-21 and oral comments on cost from minute 54 of the webcast recording.

¹⁰ Figure 1 is created using the "Primary Energy" tab in E3's *PATHWAYS model: Summary and Comparison of Scenario Results* spreadsheet (available here: <https://www.ethree.com/wp->

E3’s High Electrification case includes biogas (what RNG is produced from) growth of over 1,000% between 2020 and 2050. E3’s work also shows methane-abatement actions, including biomethane (RNG) projects, as lower-cost actions in their abatement supply curve for the near-term (2030), as shown in Figure 2.¹¹ This important conclusion from the key state-funded study initiating the discussion of building decarbonization must not be ignored because this growth in RNG will not occur without significant additional work to continue to build a supportive policy framework.

Figure 2. RNG Projects Offer Near-term Low-Cost Abatement Opportunities

Figure 25. 2030 Incremental Carbon Abatement Cost Curve (Total Resource Cost per Ton of GHG Reduction Measures, Net of Fuel Savings), in the High Electrification Scenario



III. The Use of Pipeline-connected RNG Resources Can Shift Over Time

We strongly believe that natural gas demand reduction (including through electrification) and RNG use are complementary, and that both will be necessary to hit deep decarbonization goals. Amber Mahone, one of the authors of the E3 study and a moderator at the Workshop, hinted at this possibility when she asked, “are these things in conflict with each other or can we do both of them?”¹² In response both Mr. Minter and Mr. Bartholomy agreed that a good long-run use of the RNG resource could be in transportation sector (the E3 study assigns it to the industrial sector and transport) but neither panelist addressed the near-term reality that RNG demand from

[content/uploads/2018/05/Comparison_Graphs_CEC-EPIC-GHG-Scenarios-clean-26Jan2018.xlsm](#)). It shows Biogas in the High-Electrification Scenario growing from 0.04 EJ in 2020 to 0.59 EJ in 2050.

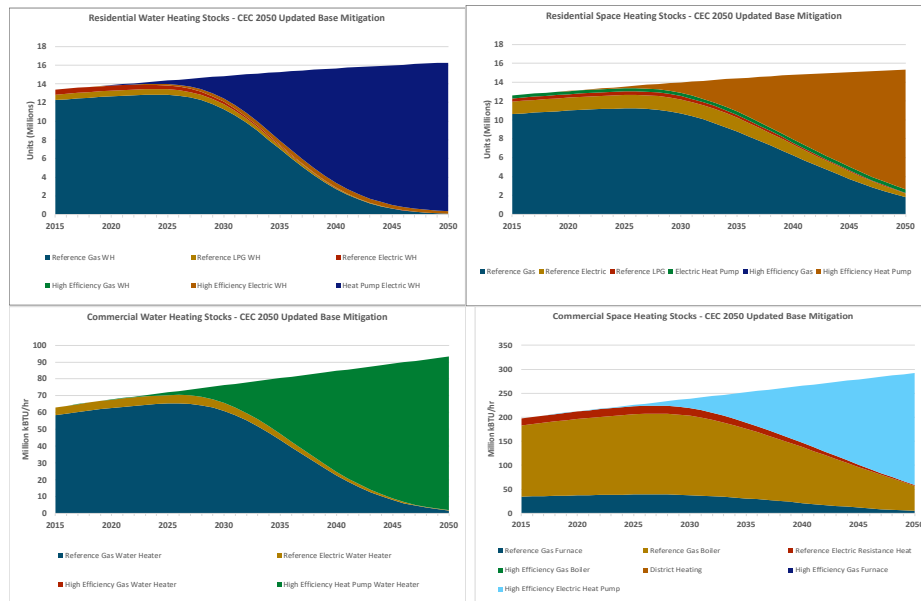
¹¹ Figure 2 is directly copied from page 56 of E3’s *Deep Decarbonization* report.

¹² Webcast recording at 1 hour and 14 minutes.

transport is becoming saturated¹³ and that no significant policy drivers exist for RNG use in industry outside of transportation.

E3's High Electrification scenario shows significant near-term remaining natural gas demand in buildings due to the time it takes to turn over the stock of long-lived appliances. It also shows demand in transport for natural gas growing slowly over time. Therefore, it should be possible to develop the RNG resource today by supporting its use in buildings and then shift it, over time, to use in transport or industry as prudent. Again, the E3 study provides helpful figures to illustrate this fact (See Figures 3 and 4).¹⁴

Figure 3. E3's Work Shows Significant Natural Gas Devices Remain in Residential and Commercial Buildings through at least the Late-2030s, In Part Due to Slow Capital Stock Turnover. This is a perfect opportunity to use RNG in the near-term.

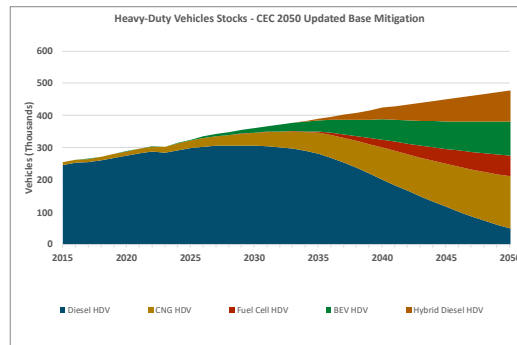


¹³ See our prior March 11, 2019 Comments in CPUC Rulemaking 19-01-011 for more on how transport use is becoming saturated:

<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M273/K147/273147188.PDF>

¹⁴ Figures 3 and 4 directly reproduced from the E3 Spreadsheet entitled *PATHWAYS model: Transportation and Building Stock and Equipment Results* (Available here: https://www.ethree.com/wp-content/uploads/2018/05/Stock_Charts_CEC-EPIC-GHG-Scenarios-clean-8Jan2018.xlsm)

Figure 4. E3 Predicts Slow Natural Gas Vehicle Penetration, but Significant Long-term Growth by 2050



Creating a balanced building decarbonization strategy that also reduces methane by promoting RNG deployment as quickly as possible is in-line with the State’s work on the importance of reducing short-lived climate pollutants. It is also supported by recent legislative direction, including the requirement for the CPUC to evaluate a RNG procurement standard (SB 1440 – Hueso, Statutes of 2018). Additional debate about the best long-run use of the RNG resource, while important, should not delay action to capture and use it sustainably today.

IV. Conclusion

We appreciate that the Joint Workshop was a first step toward a broader discussion on building decarbonization issues. We respectfully ask the CEC and CPUC to ignore the currently-polarized status of the debate and create a well-designed policy framework that promotes the use of RNG as one of many important options to help decarbonize buildings in California.

Thank you very much for your consideration of these comments. Please do not hesitate to contact me directly with any questions or concerns.

Sincerely,

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APPENDIX A

PRIOR RNG COALITION COMMENTS TO CPUC R.19-01-011

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding
Building Decarbonization.

Rulemaking 19-01-011
(Filed January 31, 2019)

**COMMENTS ON ORDER INSTITUTING RULEMAKING REGARDING BUILDING
DECARBONIZATION**

BY THE COALITION FOR RENEWABLE NATURAL GAS

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Dated: MARCH 11, 2019

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding
Building Decarbonization.

Rulemaking 19-01-011
(Filed January 31, 2019)

**COMMENTS ON ORDER INSTITUTING RULEMAKING REGARDING BUILDING
DECARBONIZATION**

BY THE COALITION FOR RENEWABLE NATURAL GAS

I. Introduction

The Coalition for Renewable Natural Gas (RNG Coalition) is a California-based nonprofit organization representing and providing public policy advocacy and education for the Renewable Natural Gas (RNG or biogas-derived biomethane) industry in North America. The RNG Coalition’s diverse membership is comprised of leading companies across the supply chain, including waste collection, recycling and waste management companies, renewable energy project developers, engineers, financiers, investors, organized labor, manufacturers, technology and service providers, gas and power marketers, gas and power transporters, transportation fleets, fueling stations, law firms, environmental advocates, research organizations, municipalities, universities and utilities.

Together, we advocate for the increased development, deployment and utilization of renewable natural gas so that present and future generations have access to domestic, renewable, clean fuel and energy for all sustainable end-use applications, including—but not limited to—the generation of electric power, thermal heat and ultra-low carbon transportation fuel.

The RNG Coalition respectfully submits these opening comments in response to the *Order Instituting Rulemaking Regarding Building Decarbonization* (OIR 19-01-011).

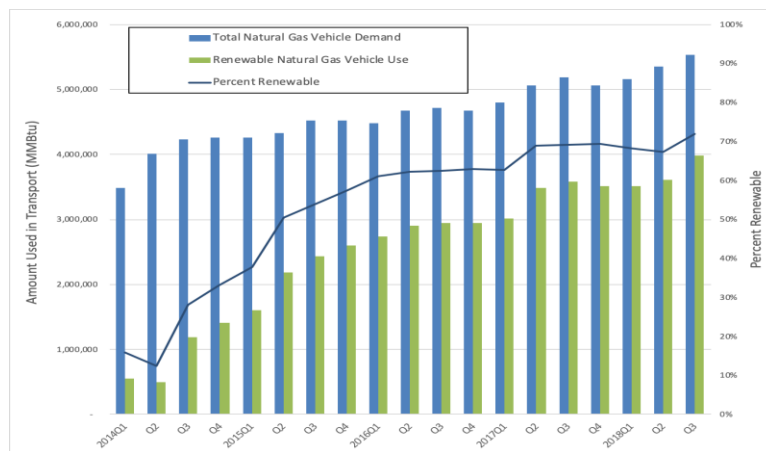
We have organized our comments below by first making the case that RNG has a significant role to play in decarbonizing buildings before responding to the specific questions outlined in the OIR.

II. RNG Contribution Potential for Building Decarbonization

1. RNG Has Demonstrated Success in Decarbonizing Transport Applications but is Saturating Existing Transport Demand in California

Federal and State policies have already created a strong driver for the use of RNG as an ultra-low carbon transportation fuel in California. As shown in Figure 1, according to the most recent quarterly data from the California Air Resources Board’s (CARB) Low Carbon Fuel Standard Program (LCFS),¹ in 2017 RNG use in transport was about 13.8 Billion Cubic Feet (BCF). In the most recent quarterly data available (Q3 2018) RNG makes up 72% of all fuel used in natural gas vehicles (NGVs) and the rate of growth in RNG supply is outpacing the rate of growth in vehicle demand. This rapid shift away from conventional natural gas toward RNG in California’s NGVs is, without a doubt, an impressive success story that has led to significant greenhouse gas (GHG) reduction.

Figure 1. Californian Natural Gas Vehicle Fuel Demand and Penetration of RNG



¹ LCFS data available from: https://www.arb.ca.gov/fuels/lcfs/dashboard/quarterlysummary/quarterlysummary_013119.xlsx

Currently, there are 95 RNG production facilities in operation in North America. Developers, financiers and investors across the RNG industry stand ready to deploy significant capital to complete additional projects. We have twenty-two new RNG production facilities under construction in the United States, and an additional 40+ projects in development (32 in the US; 8 in Canada). Unfortunately, State policy support for the continued growth and deployment of NGVs that can be fueled by RNG has not kept pace with the growth trajectory of RNG supply. Further, California policymakers are sending mixed signals regarding the future of NGVs. For example, with the adoption of the Innovative Clean Transit Rule, it is now clear that the California Air Resources Board (CARB) believes that many local transit agency fleets should rapidly transition to vehicles using only zero emission technology.²

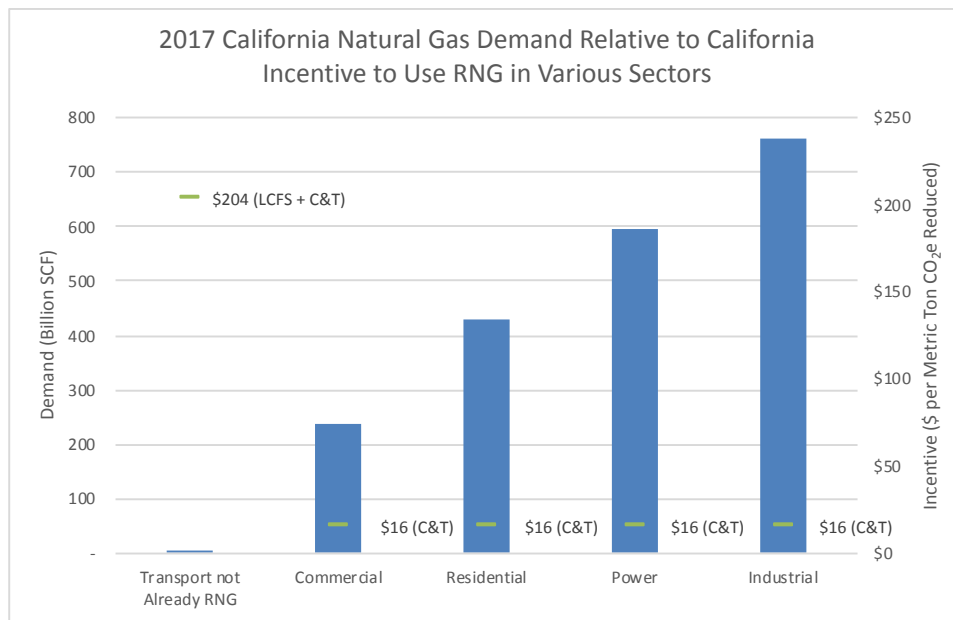
2. Non-Transport Sectors Represent Greater Potential RNG Demand, but Sufficient Policy Support is Lacking

As shown in Figure 2, the demand from NGVs not already fueled by RNG is very small compared to other existing natural gas applications. Still, the incentive to use RNG in transport provided by the LCFS is much larger than in other sectors, where the Cap-and-Trade Program is the primary tool that promotes broader RNG utilization. This reality sends conflicting signals to the RNG industry, and to project developers and investment community in particular. While we believe the greatest environmental benefits are realized when RNG is utilized in transport (due to the tailpipe emissions performance of NGVs relative to conventional diesel vehicles) the potential volumes of RNG expected to be developed in California could very likely exceed demand from

² <https://ww2.arb.ca.gov/rulemaking/2018/innovative-clean-transit-2018>

NGVs in the near future. Unfortunately, methane will continue to be produced from society’s waste streams—including landfills, from diverted organic waste, at wastewater treatment plants and livestock and agricultural operations—whether or not there are sufficient NGVs on the road. Unless sufficient policy support is provided to incent or otherwise enable development of RNG production facilities for end-uses outside of transport, these volumes of methane will be combusted (flared and wasted), or worse, escape fugitively into the atmosphere as a short-lived climate pollutant many times more potent than carbon dioxide.

Figure 2. Remaining Californian Demand from Transport is Small Relative to Other Potential Uses of RNG, Yet Incentives to Use RNG in Transport are Much Larger than in Other Sectors³



³ The Power sector has other incentives to use RNG not shown in Figure 2, such as those created by the Renewable Portfolio Standard (RPS) and the Bioenergy Market Adjusting Tariff (BioMAT). Remaining transport demand in Figure 2 is extracted from the LCFS data. Demand data from other sectors from *EIA Natural Gas Consumption by End Use*, available from: https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_sca_m.htm. LCFS prices available here: <https://www.arb.ca.gov/fuels/lcfs/credit/lrtweeklycreditreports.htm> Cap-and-Trade prices here: https://arb.ca.gov/cc/capandtrade/auction/feb-2019/summary_results_report.pdf

3. Significant Additional RNG Supply is Available in the Near-term

The RNG industry has demonstrated under multiple programs—including RPS, the federal Renewable Fuels Standard, and the LCFS—the ability to develop and deploy supply in response to appropriate incentives. Likewise, with additional policy support to help decarbonize buildings, the RNG industry is poised to invest in, develop and deliver significant supply of RNG. For example, a 2017 review by ICF pointed to a range of studies in the literature finding the potential for RNG from California supply to be between 90.6-311.3 Billion Cubic Feet (BCF) per year and total potential supply from the US to be between 932-9,230 BCF/year.⁴

Southern California Gas Company (SoCalGas) has recognized the near-term availability of the RNG resource, including from both in- and out-of-state resources, and has announced their intention to implement a broad renewable natural gas procurement program, with a goal of replacing five percent of their natural gas supply with RNG by 2022 and twenty percent by 2030.⁵

4. This Proceeding Should Allow RNG the Opportunity to Quickly Help Decarbonize Buildings

This Proceeding on building decarbonization is a critical opportunity to discuss how to further deploy RNG as a resource to achieve cost-effective GHG reductions today. Studies that rely heavily on electrification for decarbonization of the building space often predict that a significant amount of RNG is used as a complementary technology. For

⁴ <https://www.icf.com/resources/white-papers/2017/design-principles-for-renewable-gas>

⁵ <https://www.sempra.com/socalgas-announces-vision-be-cleanest-natural-gas-utility-north-america>

example, in the work done by the consulting firm Energy and Environmental Economics (E3) for the California Energy Commission (CEC), the High Electrification Scenario (CEC 2050 case) has 0.46 exajoules (~436 BCF) of RNG use by 2050, representing 65.7% of the 2050 gaseous fuel supply in that scenario.⁶

5. Investment in Infrastructure to Supply RNG Need not Conflict with Programs to Promote Building Efficiency or Electrification

The RNG industry does not claim to be able to solve the daunting challenge of completely decarbonizing all existing natural gas infrastructure across all end-use applications alone. RNG, by virtue of the fact that it can be stored over long time periods and dispatched, makes it a complementary and necessary resource, especially when paired with other forms of renewable power derived from intermittent resources. A truly diverse energy portfolio of decarbonization technologies should include and take advantage of the environmental and economic benefits associated with increased utilization of RNG.

We believe that decarbonizing the heating loads in buildings is a worthy end-use of RNG today. Further, additional near-term volumes of RNG supply is available—especially if sizeable transport demand does not materialize and the industrial sector is unwilling to embrace RNG in the short run due to competitiveness concerns.⁷

⁶ *Deep Decarbonization in a High Renewables Future: Updated Results from the California PATHWAYS Model.*
<https://www.ethree.com/wp-content/uploads/2018/06/Deep-Decarbonization-in-a-High-Renewables-Future-CEC-500-2018-012-1.pdf>

⁷ The E3 study allocates RNG primarily to the industrial sector, but there is no reason to think that a shift toward that sector (or transport) could not occur in later years once an active RNG market is developed through significant use in the building sector.

Additional cross-agency study to determine the best long-run use of the RNG resource, while valuable, should not delay action on programs and incentives to capture methane and convert it for productive end-use today. Capture and conversion of methane from society's waste streams and redeeming it for productive end-use epitomizes sustainability. If RNG is pipeline-injected it will have the added benefit of incrementally decarbonizing existing pipeline infrastructure, and can be diverted toward other end-uses in the future if deep levels of building electrification are successful.

In summary, while RNG has achieved tremendous progress in decarbonizing the transportation sector, RNG for building decarbonization remains underdeveloped and in need of additional policy support if we are going to reach the State's greenhouse gas reduction targets. Expanding support for RNG in the building sector will create additional investment certainty for project developers working hard to provide a flexible, low carbon fuel and renewable energy source today. Relative to other options to fully decarbonize the building sector in the near term, we believe RNG will prove to be a cost-effective and complementary source of greenhouse gas reduction—but additional policy support, including by the CPUC, is needed.

III. Comments on Specific Questions outlined in the OIR

6. We Agree with Organization of the Proceeding into the Four Proposed Categories, but the Overarching Policy Framework Should Receive Highest Priority

We understand the desire to divide the Proceeding into the four categories identified in the OIR (Implementing SB 1477, Potential Pilot Programs for Decarbonization of New Construction in Areas Damaged by Wildfires, Coordinating with Title 24 Building Standards and Title 20 Appliance Standards, and Building Decarbonization Policy

Development). However, we recommend that developing the overarching policy framework for building decarbonization receive the highest priority, as the other topics should be subsets of this high-level discussion.

We applaud the Commission for identifying, as a first principle, the goal of approaching building decarbonization in a technology-neutral way. If RNG and other viable technologies are provided a level playing field on which to participate and compete, the overarching program will minimize consumer costs and ensure the most optimal path toward the State's greenhouse gas reduction goals.

California has established other successful policies that create competition across a variety of greenhouse gas reduction options. For example, the LCFS is a fuel-neutral, market-based program that reduces the lifecycle greenhouse gas emissions of transportation fuels. The program has eight years of proven success and many of the same concepts could be used to create a similar policy to promote cleaner options in building heating.

7. How should the Commission go about determining the administrative structure for the SB 1477 BUILD and TECH programs, from among the options listed in the statute?

We have no comments on this issue at this time except to note that similar questions should be considered for the RNG procurement standard authorized by SB 1440 (Hueso, 2018).

8. If the Commission chooses a third-party administrator, what process should it use to select the administrator?

We have no comments on this issue at this time.

9. How should the Commission establish the budget for each program? What portion of the budget should be reserved for program evaluation? How should the program evaluator be selected?

We have no comments on this issue at this time.

10. What program design parameters should be established by the Commission independent of the program administrator, and which aspects should it allow the selected program administrator to develop on behalf of the Commission?

We have no comments on this issue at this time.

11. Should the Commission consider proposals for new rate designs as part of the design and implementation of the BUILD and TECH programs?

We have no comments on this issue at this time.

12. What goals should the Commission set for building decarbonization?

The Commission, as a first priority of this Proceeding, and in consultation with CARB and the CEC, should set an overarching metric (or metrics) for either annual carbon intensity reductions for the building sector as a whole or for various key end-uses in buildings (e.g., space heating, hot water, etc.). Such metrics must properly capture the interaction effects between actions that decrease the carbon intensity of the energy supplied (i.e., through the increased use of renewable power or gas) and those that improve the efficiency of the end use (i.e., require less energy to be used).

With respect to incentive types and levels, we recognize there may be a perceived need to depart from technology neutrality and provide higher incentives to promote cost-declines in certain nascent technologies. We believe this should be limited to specific priorities identified in statute. For example, in addition to the direction on the TECH Initiative established by SB 1477, the Commission has legislative direction to consider adopting specific biomethane procurement targets or goals for each gas corporation.⁸ Outside of any enhanced incentives for this legislatively-prescribed subset of actions we

⁸ SB 1440, Hueso, 2018

encourage a bold technology-neutral framework, ideally using declining carbon intensity standards evaluated on a lifecycle basis.

13. What other specific initiatives should the Commission examine to further the goals outlined in the question above?

The commission should examine if an LCFS-like analog for the building sector could be developed, in line with the overarching goal/decarbonization metric described above. If such an overarching program is established, the Commission should carefully examine how specific subprograms, such as those authorized by SB 1477 and SB 1440, interact with other policies established to reach the overarching goal. If an overarching policy is not considered, at a minimum the interaction effects between these policies should be clearly evaluated and transparently presented to parties.

III. Conclusion

The issues discussed in this Proceeding are critically important to continued growth in the RNG industry. Our member companies are investing in new facilities to deploy increased volumes of RNG and reduce methane emissions. We hope for clear signals that this is supported by the Commission and other California decisionmakers. A well-designed policy framework that promotes the use of RNG to help decarbonize buildings will continue the success laid by transportation policies and ensure that the State achieves its climate change goals and renewable energy objectives.

Thank you for your consideration of these comments.

R.19-01-011

DATED: March 11, 2019

Respectfully signed and submitted,

/s/ Sam Wade

SAM WADE

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding
Building Decarbonization.

Rulemaking 19-01-011
(Filed January 31, 2019)

**REPLY COMMENTS ON ORDER INSTITUTING RULEMAKING REGARDING
BUILDING DECARBONIZATION**

BY THE COALITION FOR RENEWABLE NATURAL GAS

SAM WADE
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Dated: MARCH 26, 2019

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding
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Rulemaking 19-01-011
(Filed January 31, 2019)

**REPLY COMMENTS ON ORDER INSTITUTING RULEMAKING REGARDING
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BY THE COALITION FOR RENEWABLE NATURAL GAS

I. Introduction

The Coalition for Renewable Natural Gas (RNG Coalition) is a California-based nonprofit organization representing and providing public policy advocacy and education for the Renewable Natural Gas (RNG or biogas-derived biomethane) industry in North America. The RNG Coalition respectfully submits these comments in response to opening comments from other parties on the *Order Instituting Rulemaking Regarding Building Decarbonization* (OIR 19-01-011).

In these reply comments we reemphasize that our goal is not to oppose other alternatives that may help to accomplish the changes in buildings needed to meet the State’s ambitious climate goals, only to advocate for a balanced portfolio of solutions that is inclusive of additional opportunities for RNG. We believe that many parties credibly outlined the importance of both considering RNG as part of this proceeding and, more generally, in pursuing a technology-neutral approach that involves robust lifecycle greenhouse gas performance metrics to track success or failure toward building decarbonization goals.

II. We Are Encouraged to see that Many Parties Agree that RNG has a Significant Role to Play in Decarbonizing Buildings

As we said in our opening comments, the RNG industry does not claim to be able to solve the daunting challenge of completely decarbonizing all existing natural gas infrastructure across

all end-use applications alone, but we know that RNG can be a significant contributor to this effort. We were encouraged to see this fact highlighted in the opening comments of many other parties.

For example, Environmental Defense Fund (EDF) stated that “building decarbonization from changes to the gas supply should also be explicitly included in the scope of this proceeding”¹ and the Public Advocates Office recommends that the Commission “examine the potential of renewable gas as part of building decarbonization strategy to meet the State’s GHG emissions reduction goals.”²

The gas utilities also recognize the need to consider RNG in this proceeding. Southwest Gas stated that “renewable natural gas (RNG), or biomethane, can play a valuable role in reducing GHG emissions and achieving carbon neutrality.”³ San Diego Gas and Electric (SDG&E) asked the Commission to “ensure it includes all available technology and fuel options, including renewable gas, to support building decarbonization.”⁴ Southern California Gas (SoCalGas) stated that, “utilizing RG supports energy reliability and resiliency while keeping consumer costs down, and moreover enables consumer choice—which cannot be undervalued.”⁵ Pacific Gas and Electric (PG&E) also recommends the Commission consider the role of RNG in building decarbonization, stating that, “California’s long-term GHG reduction goals can be advanced by enabling the use of RNG and hydrogen to meet customers’ needs.”⁶

¹ EDF Comments, page 4

² Public Advocates Office Comments, page 2

³ Southwest Gas Corporation Comments, page 5

⁴ SDG&E Comments, page 6

⁵ SoCalGas Comments, page 3

⁶ PG&E Comments, page 8

III. Legislative Direction and Strong Technical Analysis by Other State Agencies Identifies RNG as a Key Driver of Reaching our Decarbonization Goals

We believe this strong support for inclusion of RNG in the discussion of how to decarbonize buildings is in line with both legislative direction⁷ and the key planning documents related to long-term decarbonization in California created by other state agencies. For example, the California Air Resources Board's (CARB) Short-lived Climate Pollutant (SLCP) Reduction Plan and 2017 Greenhouse Gas Scoping Plan both rely heavily on methane reductions and the use of RNG to reach near- and long-term climate goals.⁸

The Scoping Plan stated that, “reducing demand for natural gas, *and moving toward renewable natural gas*, will help California achieve its 2030 climate target.”⁹ The importance of RNG was also recognized by the California Energy Commission (CEC) in the Final 2017 Integrated Energy Policy Report, which recommended that “the CPUC should continue to evaluate methods to promote increased use of renewable gas.”¹⁰

Further, all credible long-run studies of how to decarbonize California include a long-term role for RNG. We believe that determining the sector best suited to use the RNG in 2050, while an important long-run question, does not necessarily need to be answered today. As discussed in CARB's SLCP Reduction Plan, we must develop the RNG resource quickly to prioritize methane

⁷ For examples of strong recent legislative direction see SB 1440 (Hueso, 2018), AB 3187 (Grayson, 2018) and SB 1383 (Lara, 2016). For a summary of the history of legislation promoting RNG use for the purpose of reducing short-lived climate pollutants please see pages 264-266 of the Final 2017 Integrated Energy Policy Report (2017 IEPR) available here: https://www.energy.ca.gov/2017_energy_policy/

⁸ The SLCP Reduction Plan is here: <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>
The 2017 Scoping Plan is here: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

⁹ 2017 Scoping Plan page ES11, emphasis added.

¹⁰ 2017 IEPR, page 286

destruction and prevent near-term warming by removing short-lived climate forcers from the atmosphere as soon as possible.

IV. Concerns About Disbenefits of RNG Are Erroneous and can be Addressed Either by Relying on Prior State Work or Developing a Fact-based Record in this Proceeding

Parties opposed to wider use of RNG often claim that RNG causes problems it simply fails to correct. For example, RNG’s performance with respect to both methane leakage after pipeline injection and conventional air pollutants when combusted in building appliances is comparable to that of fossil natural gas. The solution to those existing issues is not to let the “perfect be the enemy of the good” and ban RNG as a useful tool toward our GHG goals. Instead, methane leakage from the gas system should continue to be reduced and indoor air quality impacts from natural gas appliances studied and acted upon if appropriate.

Specific to methane leakage, as quantified by the State’s GHG inventory, methane leakage from natural gas transmission and distribution (T&D) in 2016 was 4.06 million metric tonnes (MMT) of carbon dioxide equivalent (CO₂e), which is much smaller than the methane leakage occurring at potential sources of RNG such as the wastes entering landfills (8.47 MMT CO₂e in 2016) and manure management (10.17 MMT CO₂e in 2016).¹¹ We believe it is extremely unlikely that expanded RNG use would increase leakage from T&D, and we know that RNG is a proven way to directly reduce emissions from the sources associated with leaks in the state’s waste streams. Therefore, we agree with the Natural Resources Defense Council (NRDC) and the Sierra Club that the Commission should “ensure that GHG calculations include the impacts of methane leakage from all sources, from the well to the appliance.”¹²

¹¹ <https://www.arb.ca.gov/cc/inventory/data/data.htm>

¹² NRDC and Sierra Club Comments, page 18

When such “lifecycle” accounting has been applied in other programs, such as the Low Carbon Fuel Standard, it has demonstrated the benefits of RNG projects and shows, on balance, that as long as there is both natural gas demand in buildings and methane being vented into the atmosphere from waste streams, we should attempt to meet building demand using renewable, rather than conventional, natural gas.¹³

As another example where we need to avoid conflating causality, it is not the RNG project at a large dairy that creates perceived problems with water and air quality from high-density farms.¹⁴ Rather, capturing methane for RNG improves one aspect of the environmental performance of the existing farm. Other methods to address methane from these operations may also have similar complexity and create potential trade-offs. The State has fashioned many other forums for these discussions.

For example, to facilitate stakeholder dialogue around measures to reduce dairy and livestock emissions, SB 1383 required CARB to work with a broad range of stakeholders on development of dairy methane emissions reduction projects. At the end of 2018 the subgroups of this effort presented final recommendations to principals from CARB, the California Department of Food and Agriculture, the CEC, and the CPUC.¹⁵ We believe that all of the issues covered by that process do not need to be revisited in this proceeding, but we look forward to providing additional information to the Commission from that proceeding, should it prove helpful.

¹³ We strongly believe RNG supply to buildings will be available at costs comparable to other abatement options encouraged by California’s key climate programs. The 2017 Scoping Plan found that the cost-effectiveness of a strategy using RNG to meet a 5 percent renewable gas procurement requirement was on par with other necessary initiatives (such increasing the Renewable Portfolio Standard and the Low Carbon Fuel Standard obligations to 60 percent and 18–25 percent, respectively). See Table 9 on page 43 of the Scoping Plan. CEC reinforced that finding in the 2017 IEPR (page 267).

¹⁴ California Environmental Justice Alliance’s Reply Comments, page 5

¹⁵ <https://www.arb.ca.gov/cc/dairy/dairy.htm>

IV. Conclusion

A well-designed policy framework that promotes the use of RNG as one of many options to help decarbonize buildings will continue the success laid by similar flexible policy in other sectors and will be an essential component of hitting California's near-term goals for methane reductions.

Thank you very much for your consideration of these comments.

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Respectfully signed and submitted,

/s/ Sam Wade

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