

Coalition Comments:

Heavy Duty Technology and Fuels Assessment Overview and Status Update

April 30, 2015

Respectfully Submitted to

California Air Resources Board 1001 "I" Street PO Box 2815 Sacramento, California 95814

Prepared by

The Coalition for Renewable Natural Gas 1017 L Street, #513 Sacramento, CA 95814 916.520.4764



Dear California Air Resources Board:

Thank you for the opportunity to provide written comments on your Draft Heavy Duty Technology and Fuels Assessment Overview and Status Update.

The Coalition for Renewable Natural Gas (RNG Coalition) is the non-profit organization representing the global renewable natural gas industry. RNG Coalition members collectively produce more than 90% of the total transportation fuel grade and pipeline quality renewable natural gas (RNG) volume in North America.

Support for Process and Treatment of Renewable Natural Gas

We appreciate the process that ARB Staff have undertaken with the *Heavy Duty Technology and Fuels Assessment Overview and Status Update* (Assessment). The draft clearly reflects stakeholder feedback from ARB-hosted workshops, including feedback from the renewable natural gas industry. We especially appreciate your comment that *renewable natural gas is an important ultra-low carbon intensity fuel that can be used in a wide variety of applications.* (pg. 16).

The RNG Coalition agrees with your key preliminary observation that *renewable* fuels will be necessary to meet GHG and petroleum reduction goals and will be a critical part of an integrated solution to achieve a sustainable and renewable electrical grid and transportation system. And that renewable natural gas will be a critical part of the portfolio of technologies and fuels.

Thank you for your recognition that there are *significant GHG benefits* from *capturing and utilizing waste streams*. We agree that *the volumes are not large*, and also that the *projects are important*. (pg. 17).

Overall we are very pleased with the Assessment's treatment of renewable natural gas.

In two areas, however, we do wish to offer constructive comments which we believe staff may easily address prior to final publication.

Low Carbon Fuel Supply Heavily Dependent on Good Public Policy

In <u>Biofuel Supply Versus Demand in 2030</u>, you write: Low carbon fuels alone will most likely not be available in supplies large enough to service demand without major improvements in vehicle and engine efficiencies in all heavy-duty categories. (pg. 18).

We recommend that it is too early to tell whether enough low carbon fuel supply will be available to meet demand in 2030. We believe the various feedstocks for low carbon fuels are abundant, and while we agree that vehicle and engine efficiency is important, it is our assertion that legislative and regulatory policies are the most important factor that will determine whether low carbon fuel supply can meet 2030 demand.



The RNG Coalition encourages recognition of the uncertain nature of 2030 low carbon fuel supply and the important role public policy will play in low carbon fuel development.

Near-Zero Technologies An Important Part of California's Clean Air Future.

Thank you for your important note in <u>Well-to-Wheel Analysis</u> that zero emission vehicles do have a WTW emission factor, because of the upstream emissions associated with the production and distribution of electricity or hydrogen that is used to power the vehicle. And also for staff analysis suggesting that substantial reductions in WTW emission factors are possible using advanced diesel and natural gas engines and vehicles.

Candidly, however, your caveat that follows these statements are concerning when placed in the context of the broader report. You write: However the greatest reduction in WTW emission factors can be achieved through the use of zero emission technologies operated on renewable electricity and hydrogen, and through the use of near-zero emission technologies operated on renewable fuels such as renewable natural gas and renewable diesel. (pg.18).

In isolation, we agree with the statement. And we could easily argue that the renewable natural gas industry is bolstered by it. But later in this section you write: *In addition, near-zero emission vehicles, equipment and vessels will be needed where zero emission technology is not yet feasible.*

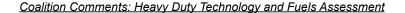
This context leads us to wonder if near-zero technologies, even when operated on renewable fuels, are viewed by ARB as merely a bridge to zero emission technologies, to be tolerated only so long as necessary.

And near-zero emission vehicles can plan an important role in achieving emissions reductions in the coming decade.

We argue that near-zero technologies offer reductions in WTW emission reductions so substantial as to warrant them an integral part of ARB's strategy not only for today, but also indefinitely into the future.

Bolstering our concern is the lack of near-zero technology examples in this report. We read the overview of diesel engines (pg. 4) and the substantial analysis of zero emission vehicles / equipment and hybrids (pg. 8) with great interest. The selected examples, including twenty-one figures with named manufactures and deployment status, provided a good summary of the zero emission sector. The comments on cost and pay back were especially helpful. But the lack of near-zero technology examples and illustrations, specifically natural gas vehicle technologies, was glaringly missing.

We look forward to the sector specific reports ARB will release for public comment in 2015. And we fully anticipate to see NGVs highlighted in the appropriate report. This Assessment promotes understanding of the current and future of heavy duty technology. To include zero-emission, and not near-zero, examples and explanation paints an incomplete picture.





Finally, you write: prioritization is needed to help focus incentives in areas that can lead to the most efficient development and deployment of technologies in the heavy duty sector to achieve air quality and climate goals.

We urge that prioritization is needed to deploy technologies that can provide air quality and GHG benefits immediately, including leveraging the natural gas vehicles industry to deploy near-zero technologies and expand the development of renewable natural gas fuel supply.

The RNG Coalition encourages inclusion of selected examples of near-zero technologies, especially those capable of running on renewable fuels like renewable natural gas.

Concluding Comments

The Coalition for Renewable Natural Gas thanks you for your commendable work on the *Heavy Duty Technology and Fuels Assessment Overview and Status Update*. We especially appreciate ARB's process and treatment of renewable natural gas. Thank you also for your kind consideration of our more constructive comments. We hope our input aids your efforts to produce and publish the strongest possible final *Assessment*.

Yours In Service,

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