The Road to 2020 and Beyond Tim Carmichael's talking points March 17, 2015

Hello I'm Tim Carmichael and I'm the President of the California Natural Gas Vehicle Coalition

Thank you for inviting me to participate today

Let me start by directing you to our first slide which shows the logo of our member companies. It's a great mix of small and large companies that have a common interest in advancing natural gas as a transportation fuel in California.

Thank you to the committee staff for the prompter questions. I focused on two – what is working well and what needs more attention.

What is working well

Several of the incentive and regulatory programs I am familiar with are working pretty well to expand the availability of clean fuels and increase the use of alternative fuel vehicles in California These include:

- CA Energy Commission's Alternative and Renewable Fuel and Vehicle Technology or AB 118 program
- Low Carbon Fuel Standard program at the Air Resources Board
- HOV lane clean car sticker program

When I say working pretty well that doesn't mean there isn't room for improvement. In fact I believe all of your speakers today and many of our colleagues are working hard to improve these programs through the use of better metrics, simpler administration, and the latest information on technology advancements.

What needs more attention

I am happy to answer questions about these programs but I want to use the rest of my time today to highlight two areas where I think California's program is weak and really needs a lot more attention.

The first is Heavy Duty Trucks

Heavy duty = class 7 and 8. What most people think of as big rigs or 18 wheelers

There are several hundred thousand of these trucks in California

They are a significant source of ghgs emissions and are the largest source of NOx emissions in the SJV and SCAQMD

Less than 5% of these are alternative fuel trucks

The problem I want to highlight for you is that California does not have a near-term or mid-term strategy for reducing emissions from heavy duty trucks!!! Near-term is next 5 years and mid-terms is next 10-15 years. And as a result is not doing enough to reduce emissions from this sector in the near-term.

The Brown Administration is very very focused on "zero emission technologies" such as hydrogen fuel cells and battery electric vehicles.

I believe CA should continue to invest in the development and demonstration of these technologies but recognize that for HD truck applications they are still a long ways off

ARB's own technology assessment has found that it is <u>unlikely</u> that these zero emission technologies will be ready for heavy duty truck applications until after 2030

Much much more can and should be done over the next 5 years to provide incentives for clean trucks including heavy duty natural gas trucks. Many heavy duty trucks operate in highly impacted and disadvantaged California communities. Thus these investments have both environmental and economic benefits for companies using natural gas trucks, the communities where these trucks operate, and for everyone in California.

- These same trucks are running in California on renewable natural gas where it is available.
 - RNG aka biomethane derived from various waste streams
 - Renewable natural gas is one of the lowest carbon fuels the ARB has identified
- The next generation low-NOx or low smog forming natural gas truck engines will be available by 2018 and possibly sooner.

We believe these near-term investments in natural gas trucks are very important for multiple California goals. In fact they are critical to achieve

- Low Carbon Fuel Standard attainment in 2020 [Refer to 2nd slide LCFS PIE CHART]
 - Note importance of RNG
- State Implementation Plan (SIP) attainment in 2023 and 2032
 - Air districts are very keen on this
- And the newly emerging goal of a 50% reduction in petroleum by 2030
 - Truckers believe this is possible but are counting on natural gas as a big part of the diesel replacement strategy

Our industry recognizes that some are very concerned about methane emissions from the natural gas system. Our member companies and many others are working with government agencies and environmental organizations to identify problems and address them as quickly as possible.

The second area where I think California is weak and could be doing much better is renewable biofuels

In particular California can and should do much more to incentivize and invest in renewable natural gas fuel production, distribution, and use

There are several studies out in the last year or so talking about the tremendous potential to produce of renewable natural gas in California. could be more than 2 billion gallons annually. This is not going to happen anytime soon without a lot more investment from both the public and private sector.

A parting thought.

- As your discussion of these issues continues I strongly encourage you to include the California Trucking Association, the railroads, the ports and some of the big shipping companies to participate.
- These are the sectors we are counting on to not only try but to embrace the various clean technologies and fuels discussed today.
- if the big users are not on board California will not achieve its goals in this area.

Thank you again for the invitation to be part of this hearing.