September 20, 2012

California Air Resources Board
1001 I St.
P.O. Box 2815
Sacramento, CA 95812

RE: Vision for Clean Air: A Framework for Air Quality and Climate Planning

The California Trucking Association (CTA) would like to thank the Air Resources Board (ARB) for its preparation of the Vision for Clean Air: A Framework for Air Quality and Climate Planning Document ("the Vision Document") and for the opportunity to comment on this important undertaking.

The Vision Document as Modeling Exercise

As reiterated multiple times by ARB Staff, the Vision Document is not a rulemaking, an introduction of specific control measures, a plan or a prediction of the future that chooses "winners and losers". Its purpose is to serve as a modeling exercise to demonstrate the scope of potential technology and fuel mixes necessary to meet 2023 and 2032 air quality standards, 2050 climate goals and guide future planning. The three scenarios presented by the Vision Document have been "reverse engineered" from these goals without regard to economic or technological feasibility. As such, we will frame our comments in this context.

In the Appendix "Actions for Development, Demonstration, and Deployment of Needed Advanced Technologies", Staff discusses, in concept, the South Coast Air Quality Management District's (AQMD) proposed Control Measure ONRD-5. This inclusion seems to stand in conflict with Staff's stated goals for the Vision Document.

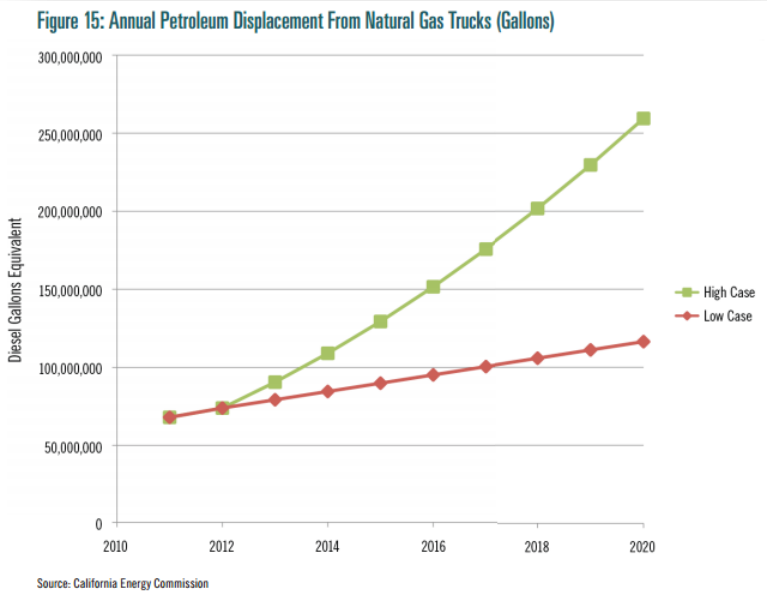
CTA has engaged in productive discussions with the AQMD and ARB Staff regarding this proposed Control Measure and we agree with Staff's statement that "the case of container transport between the San Pedro Bay ports and near-dock railyard facilities is unique". Thus, it is not a certainty that advancements toward zero or near-zero emission technologies in this area would translate towards the State's larger air quality and climate goals.

We would recommend that the Vision Document remain a pure scoping document and that discussions of actual projects are tabled until a later date as it is not practical to conduct a robust analysis of specific measures in the context of this effort.

Business As Usual Scenario Assumes No Growth in Alternative Fuels or Technologies; Still Shows Significant Emission Reductions for On-Road Truck Sector

ARB Staff's Business As Usual (BAU) scenario may be overly pessimistic. Staff assumed:

- A flat 2% share of Heavy-Heavy Duty (HHD) Natural Gas (NG) trucks in-state, a 0% share for HHD NG out-of-state and a 0% share for Medium-Heavy Duty (MHD) NG trucks. There is ample evidence to indicate that this is not a correct assumption. The California Energy Commission included a near-term growth estimate for the natural gas trucking sector in their 2011 Integrated Energy Policy Report[1] which could serve as a basis to forecast growth in the Vision Document's Business As Usual scenario.



[1] http://www.energy.ca.gov/2011publications/CEC-100-2011-001/CEC-100-2011-001-CMF.pdf

The National Petroleum Council has also forecasted growth for natural gas in the HHD sector.[2]

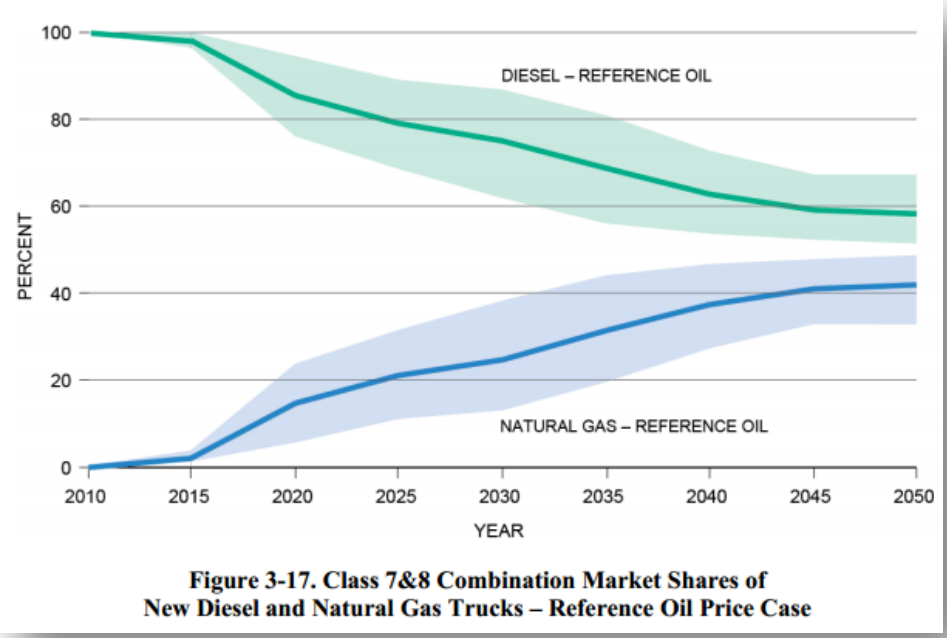
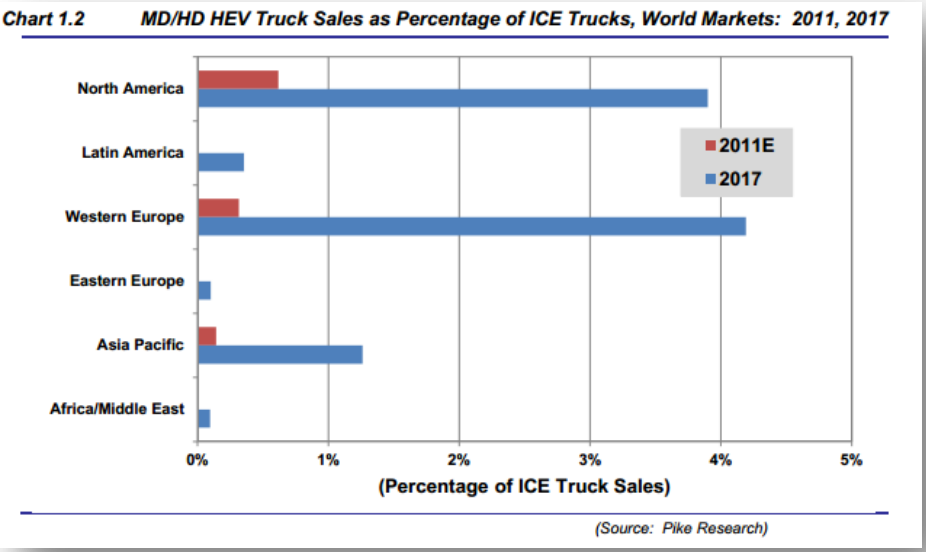


Figure 3-17. Class 7&8 Combination Market Shares of New Diesel and Natural Gas Trucks – Reference Oil Price Case

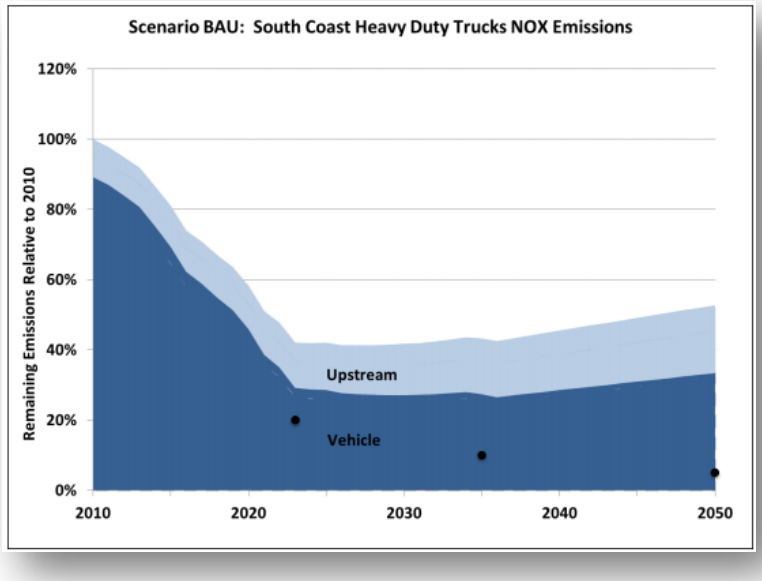
- A 0.16% share of Renewable Diesel by 2010 with zero growth through 2050. The National Petroleum Council forecasts a range of 1.3-2.8 billion gallons of Fischer-Tropsch Diesel produced nationally by 2040.[3] While this production forecast falls well short of the 95% share for Renewable Diesel assumed under the "clean fuel" scenario in the Vision Document, it does seem appropriate to forecast some growth under the BAU scenario.

[2] http://www.npc.org/FTF-report-080112/Ch3-Heavy_Duty-080112.pdf
[3] http://www.npc.org/FTF-report-080112/Biofuels_Analysis-080112.pdf

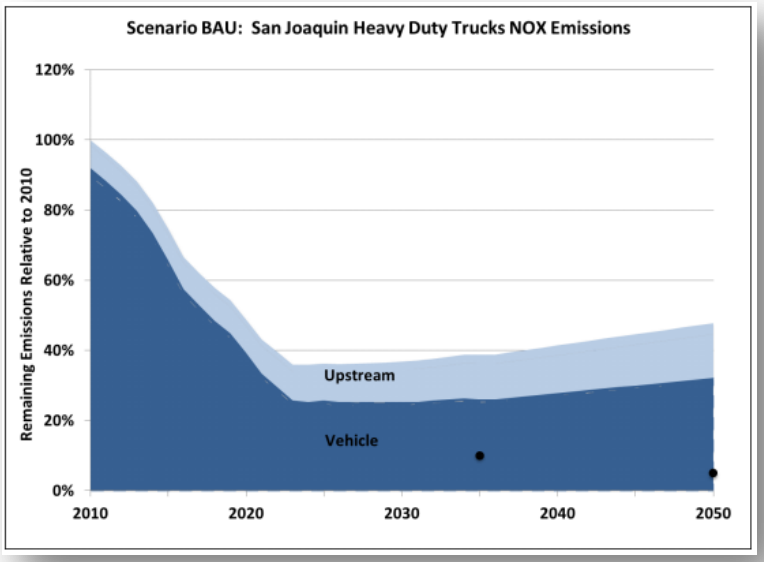
- 0% shares for hydrogen, partial hybrid electric vehicles, hybrid electric vehicles and battery electric vehicles in the HHD and MHD sectors under the BAU scenario. Pike Research forecasts an up to 4% share for hybrid electric trucks by 2017.[4]



Still, the existing BAU scenario forecasts significant emission reductions in the South Coast and San Joaquin Valley Air Basins for the On-Road Truck Sector, greatly outpacing BAU reductions for the commercial shipping and freight rail sectors.

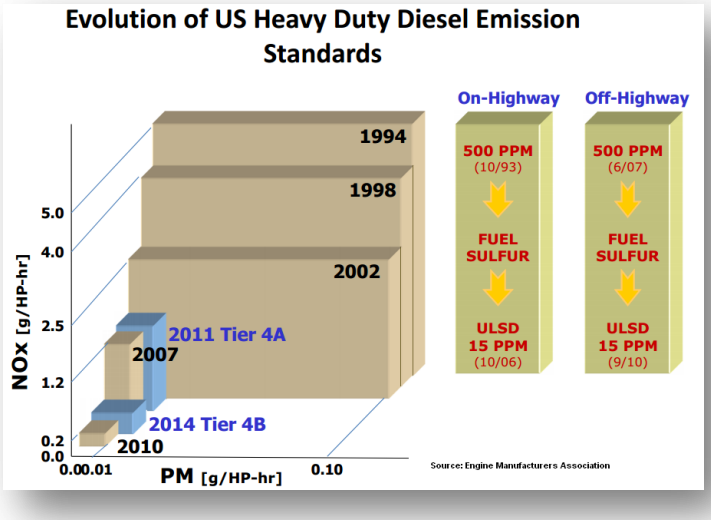


[4] http://www.pikeresearch.com/wordpress/wp-content/uploads/2011/09/HTKS-11-Executive-Summary.pdf



Vision Document Should Consider Further Advancements of "Traditional" Technologies

Recent studies conducted by the Lovelace Respiratory Research Institute in conjunction with the Health Effects Institute have studied biological response in rodents to emissions from 2007 and newer New Technology Diesel Engines (NTDE). The majority of the analyses showed "no difference between diesel exhaust exposure and clean air control".[5] While this research continues, these initial reports highlight the remarkable advancements in engine technology that have been achieved in recent decades.



[5] http://www.arb.ca.gov/research/seminars/wall/mcdonald.pdf

Given the progress achieved over the past 15-20 years, it is not unreasonable to expect further advancement by 2050. Staff suggests a new NOx standard of 0.04 gNOx/mi in Scenario 3. Other very plausible scenarios include reductions in criteria pollutants stemming from Renewable Diesel use.[6] [7] We recognize it is very difficult to predict the state of technologies, even those considered "traditional", on a 38 year time horizon.

At recent workshops, other participants from alternative technology sectors voiced similar concerns regarding an apparent disregard towards advancement in alternative fuel and hybrid engine technologies. Despite staff's good-faith attempts to remain technology neutral, it seems unavoidable that the Vision Document will be perceived by some as "picking winners".

Vision Document Goals Aspirational; Subsequent Policy and Planning Decisions Must Be Pragmatic

The Vision Document sets long-term, multi-sector aspirational goals based on California's most challenging Clean Air Act criteria pollutant and AB32 greenhouse gas reduction targets. Understanding the scale of change this Document suggests is necessary to achieve these goals, what staff refers to as "ambitious assumptions", should be sobering for both policymaker and stakeholder alike.

In order to ensure further progress, future planning efforts must take a more pragmatic approach that addresses:

- Cost-Effectiveness
- Technological Feasibility
- Commercial Feasibility
- Infrastructure Needs

CTA members have participated in pilot demonstrations of every major emission control and alternative truck technology developed to date, including natural gas, battery electric, dual-fuel and hydrogen fuel cell trucks. CTA urges the ARB to bolster its dialogue with industry, as private stakeholder engagement and investment will continue to play a vital role in developing, testing and deploying new technologies that may achieve further air quality gains.

If you have any questions please feel free to contact Chris Shimoda, CTA's Manager of Environmental Policy at (916)373-3504 or cshimoda@caltrux.org.

[6] http://www.greencarcongress.com/2012/05/happonen-20120519.html
[7] http://www.arb.ca.gov/fuels/diesel/altdiesel/20111013_CARB%20Final%20Biodiesel%20Report.pdf

Thank You,

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