Ariel Fideldy, Manager
Austin Hicks, Air Pollution Specialist
California Air Resources Board
1001 I Street
Sacramento, California 95814
(electronic submittal at https://ww2.arb.ca.gov/applications/public-comments#COMM2
California Air Resources Board)

Subject: Comments Submittal RE 2022 State Strategy for the State Implementation Plan January 31, 2022

I appreciate the great work by the CARB and request your consideration of the Revision Recommendations and Suggestions below.

## **Revision Recommendations**

- 1. Please include in *Appendix A Economic Analysis* or elsewhere the estimation/projection of potential economic gain that would likely result from implementation of advanced technologies beyond considering only the costs and costs savings associated with the respective Strategy measures. The design, development, procurement, distribution, and implementation of new technologies likely results in economic gain for profit-motivated entities involved in technology advancements. For example, transition to zero emission equipment represents opportunities for significant employment gains and return on investment in all phases of the transition from design through certification and operation.
- 2. Please consider the disincentivizing of natural gas heavy duty trucks due to the continued release of methane associated with natural gas production, transport, storage, and use. The ARB is well familiar with the harmful climate effects of methane (more than 80 times more potent than carbon) and of the increasing damage from climate change compared to the potential reduction in NOx that might be gained with the transition from diesel to natural gas in heavy duty trucks.
- 3. Please consider limiting further regulatory actions for Ocean Going Vessels only to those intended to achieve zero emission by 2030 and the specific mitigations to reduce at-anchor emissions in the immediate term. The CARB is appreciated for both the Vessel Clean Fuel Regulation and the At Berth Regulation and, as ships are the greatest source of pollution from port operations, the two CARB OGV regulations resulted in the greatest reduction in Port emissions of all actions to date. I thank the CARB and recognize that recent and key environmental declarations compel the CARB to continue the OGV emission reduction success in partnership with others as very significant cooperative opportunities now exist.

The October 2021 US commitment to the Clydebank Declaration (six zero emission corridors by mid-decade), the November 2021 City of Los Angeles Resolution calling for the transition to 100% Zero Emission shipping at the Port of Los Angeles by 2030, and the January 2022 C40 Cities (including Ports of Los Angeles and Shanghai) requiring low, ultra-low, and zero

carbon fueled ships through the 2020s with zero carbon trans-Pacific container ships by 2030 are critically significant actions that compel the CARB to quickly define the plan to help achieve zero emission shipping by 2030.

Of great urgency and importance, I ask that the CARB participate in the C40 Cities meetings in process to define their plan due by year end 2022 to achieve Zero Emission shipping by 2030.

4. The evaluation of new OGV technologies in development must be largely focused on those that achieve zero emission as batteries and fuel cells and the evaluation of cleaner fuels must be focused on those derived from 100% renewable sources as hydro, solar, and wind (e.g., hydrogen produced through solar).

## **Suggestions**

- I strongly encourage the Strategy of advocacy and "call to action" by the federal
  government (reference Figure 5) for key reasons including the encouragement of more
  standardized, national approaches (both procedures and equipment), leveling of
  competitive interests across the US, and to more likely ensure the success of ARB measures
  in light of potential resistance from entities that might claim federal preemption or other
  efforts to undermine regulatory action.
- I ask that the CARB proceed urgently with our US Executive Administration to advocate that the US EPA enable state leadership on zero-emission trucks by prioritizing federal grants toward zero-emission technology and associated infrastructure.
- Please also proceed with great urgency as planned in Chapter 5, Zero-Emission Trucks measure, to support local zero-emission zones and/or differentiated registration fees (higher rates for dirtier trucks while zero-emission trucks receive consistent source of incentive funding) and to phase in the registration requirements defined in Chapter 5 applicable to Drayage trucks.
- Please proceed with great urgency in implementation and encouragement of market signal tools to drive the transition to zero-emissions zones as soon as possible and by 2035.
- Please advocate in the immediate term at the federal and international levels to achieve additional emissions reductions from OGVs.
- Please ensure the timeliness of the Vessels at Anchor Evaluation and delivery of the public report by December 1, 2022.
- Please pursue regulatory measures to achieve further emissions reductions from OGVs such as cleaner technologies than those required by US EPA and the IMO and that are consistent with the goal to achieve Zero Emission shipping by 2030.

Thank you.

Richard Havenick

3641 South Parker Street

San Pedro CA 90731

& Havenick

310 832 8070; havenick@cox.net