



2929 Allen Parkway, Suite 4100, Houston, TX 77019

August 5, 2020

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Via E-Submittal: https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=cn-fuels-infra-ws&comm_period=1

Subject: Fuels and Infrastructure Carbon Neutrality Workshop- July 15, 2020¹

Trillium appreciates the opportunity to engage in CARB's continuing process to develop a Carbon Neutrality policy for the State. We are committed to building the fueling infrastructure needed to help the state achieve its decarbonization *and* clean air quality goals, including the deployment of medium- and heavy-duty zero emission vehicles.

Trillium is technology agnostic and supports all forms of clean (low- and negative carbon) transportation solutions including: hydrogen fuel cell, battery electric, renewable natural gas (RNG), renewable diesel and biodiesel.

We recognize CARB's efforts to implement AB/SB32 to reduce the greenhouse gas (GHG) have achieved success to-date. However, while the state has decreased its GHG emissions since the program started, emissions from transportation have increased for the last several years. Given that liquid transportation fuels will be needed for the foreseeable future—approximately 20 million vehicles will still contain internal combustion engines by 2050²—it is critical that the State continue to focus on programs such as the Low Carbon Fuel Standard to reduce the carbon intensity of fuels sold and used in California under any new Carbon Neutral policy scheme.

We also believe that there are two important concepts to convey after listening to the various panelists at the workshop:

1. The next generation of vehicles are needed, at scale, to define infrastructure needs; and
2. Though fueling infrastructure can't lead, it can be deployed faster than vehicles.

Trillium is supportive of all technologies, and will be there to provide California customers their necessary infrastructure and fuel, no matter what they choose, but choice is key. The number of stations (EV or H2), the charging/filling configurations, distance between locations are just a few of the decision points to be determined after we understand the technical specification of scaled-up vehicles. The lead time required to design and build a next generation vehicle is substantially longer than the time required to permit and build fueling infrastructure. It isn't a chicken and egg issue; the private fueling market will respond to opportunities, but can't be expected to guess at the answers to basic business fundamentals.

¹ <https://ww2.arb.ca.gov/our-work/programs/carbon-neutrality/carbon-neutrality-meetings-workshops>

² Solecki, M. Presentation at CARB Fuels and Infrastructure for a Carbon Neutral Economy workshop. July 15, 2020. https://ww2.arb.ca.gov/sites/default/files/2020-07/ajw_cn_fuels_infra_july2020.pdf



2929 Allen Parkway, Suite 4100, Houston, TX 77019

Trillium would like to support the concepts presented in the afternoon panel. There was a recognition of the value of retaining the existing natural gas pipeline infrastructure. California has built a robust energy infrastructure over the years; it would not be good public policy to abandon it and start over. This is particularly true given that infrastructure can be utilized to deliver carbon negative fuels such as renewable natural gas.

Trillium looks forward to working with CARB on the variety of issues related to Carbon Neutrality in this informal process, as well as in the more formal Scoping Plan development. Thank you for your time and consideration.

Most sincerely,

Joshua Edge
Director of Trillium