

May 31, 2019

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Jeffrey Serfass | Executive Director
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The Honorable Senator Nancy Skinner
State Capitol, Room 5094
Sacramento, CA 95814

RE: SB 44 – Medium- and heavy-duty vehicles: comprehensive strategy – CHBC Support

Dear Senator Skinner:

The California Hydrogen Business Councilⁱ (CHBC) is proud to support SB 44, which directs the Air Resources Board (ARB) to develop a comprehensive strategy for the deployment of zero emission medium- and heavy-duty vehicles.

California is a global leader in transportation electrification with battery electric and fuel cell electric vehicle technology, especially in the light duty sector. However, heavy-duty transportation remains a major contributor to GHG emissions in Californiaⁱⁱ, as well as criteria pollutants like NOx, SOx and particulate matter, which negatively impact the health of local residents. In order to provide clean air for all Californians, and especially those around freight corridors, it is critical to address truck emissions, and this bill is a great start to developing a strategy to do so.

The CHBC supports this bill because hydrogen fuel cell electric technology is the most promising choice for transportation applications that can benefit from its attributes of long range, rapid fueling, low powertrain weight, and where there is lack of access to charging infrastructure. Fuel cells perform well in adverse weather conditions without range losses and in long distance freight where schedules do not allow for long wait times to recharge. Lighter payloads for onboard hydrogen compared to the heavier weight of batteries make fuel cells that much more economical than other ZEV options. It is a one-for-one, emissions-free replacement for diesel technology while delivering similar performance and total cost of ownership competitiveness with diesel power as volume increases.

Several manufacturers are developing first and second-generation fuel cell medium and heavy-duty trucks, and this bill will create a long-term strategy that will encourage manufacturers to invest further in R&D as well as commercial deployments in California.

In view of these many positive factors, the CHBC supports SB 44.

Sincerely,



Emanuel Wagner

Deputy Director

California Hydrogen Business Council

ⁱ The CHBC is comprised of over 100 companies and agencies involved in the business of hydrogen. Our mission is to advance the commercialization of hydrogen in the energy sector, including transportation, goods movement, and stationary power systems to reduce emissions and dependence on oil. The views expressed in these comments are those of the CHBC, and do not necessarily reflect the views of all of the individual CHBC member companies. Members of the CHBC include Advanced Emission Control Solutions, Air Liquide Advanced Technologies U.S., Airthium, Alameda-Contra Costa Transit District (AC Transit), American Honda Motor Company, Anaerobe Systems, Arriba Energy, Ballard Power Systems, Bay Area Air Quality Management District, Beijing SinoHytec, Black & Veatch, BMW of North America, California Performance Engineering, Cambridge LCF Group, Center for Transportation and the Environment (CTE), CNG Cylinders International, Community Environmental Services, CP Industries, Dash2energy, Eco Energy International, Eldorado National – California, Energy Independence Now (EIN), EPC - Engineering, Procurement & Construction, Ergostech Renewal Energy Solution, EWII Fuel Cells, First Element Fuel, FuelCell Energy, GenCell, General Motors, Geoffrey Budd G&SB Consulting Ltd, Giner ELX, Gladstein, Neandross & Associates, Greenlight Innovation, GTA, H2B2, H2Safe, H2SG Energy Pte, H2Tech Systems, Hitachi Zosen Inova ETOGAS GmbH, HODPros, Hydrogenics, Hydrogenious Technologies, Hydrogen Law, HydrogenXT, HyET - Hydrogen Efficiency Technologies, Hyundai Motor Company, ITM Power, Ivys, Johnson Matthey Fuel Cells, Kontak, KORE Infrastructure, Life Cycle Associates, Linde North America, Longitude 122 West, Loop Energy, Luxfer/GTM Technologies, McPhy Energy, Millennium Reign Energy, Mitsubishi Hitachi Power Systems Americas, Montreux Energy, National Renewable Energy Laboratory (NREL), Natural Gas Fueling Solutions – NGFS, Natural Hydrogen Energy, Nel Hydrogen, New Flyer of America, Next Hydrogen, Noyes Law Corporation, Nuvera Fuel Cells, Pacific Gas and Electric Company - PG&E, PDC Machines, Planet Hydrogen, Plug Power, Port of Long Beach, PowerHouse Energy, Powertech Labs, Primidea Building Solutions, Proton OnSite, RG Associates, Rio Hondo College, Rix Industries, Sacramento Municipal Utility District (SMUD), SAFCell, Schatz Energy Research Center (SERC), Sheldon Research and Consulting, Solar Wind Storage, South Coast Air Quality Management District, Southern California Gas Company, Sumitomo Corporation of Americas, Sunline Transit Agency, T2M Global, Tatsuno North America, The Leighty Foundation, TLM Petro Labor Force, Toyota Motor Sales, True Zero, United Hydrogen Group, US Hybrid, Verde, Vinjamuri Innovations, Volute, WireTough Cylinders, Zero Carbon Energy Solutions.

ⁱⁱ Direct emissions from the tailpipe of cars, trucks, off-road transportation sources, intrastate aviation, etc., accounted for 39%* of the inventory in 2016 (it was 37% in 2015), and saw an increase in emissions in 2016. -

https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf