



Hydrogen Means Business in California!

June 15, 2018

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The Honorable Ben Hueso
California Senator
State Capitol, Room 4035
Sacramento, California 95814

RE: SB 1440 (Hueso): Biomethane Procurement Goals – Oppose Unless Amended

Dear Senator Hueso:

The California Hydrogen Business Council (CHBC) ⁱ regretfully withdraws our *Support If Amended* for SB 1440 and opposes this bill, unless amended to include other forms of renewable gas, including renewable hydrogen. By picking winners and losers among the various renewable gases, **the current language in SB 1440 will severely limit the emission reduction potential for short-lived climate pollutants and greenhouse gases** that would result from a broader statewide renewable gas procurement program.

Background

SB 1383 provided authority to the Air Resources Board, the CEC and the CPUC to pursue policies and program to support the development of renewable gases (RG) – including renewable hydrogen – particularly in a new RG procurement program. CHBC was active to help pass Senator Lara’s short-lived climate pollutant (SLCP) policy, as part of an important SLCP emission reduction initiative. One of the goals of the legislation was to promote the new and increased production of renewable gases in the state to replace fossil produced natural gas (and thereby reduce methane emissions).

The 2016 SLCP law was crafted to be broad and to include a variety of **renewable gases** from renewable methane derived from landfills, diverted food waste to renewable hydrogen produced through electrolysis or directed biomethane conversion to hydrogen. In fact, during the course of the bill development, the section authorizing incentives and programs for renewable gas was initially drafted to be limited to renewable **natural** gas (i.e., biogas and biomethane) and intentionally redrafted to eliminate the word “natural” so that an inclusive program would be developed that could include renewable hydrogen and other new renewable gases that may be developed to replace conventional fossil derived natural gas in the future.

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SB 1440 Undercuts Emission Reductions

While existing state policy promotes a broad statewide renewable gas production and procurement policy, SB 1440 picks a narrow set of high-cost incumbent renewable gas producers and sets the state on a path for a restricted program that will not yield high emission reductions. By moving the state away from a broad RG portfolio from which to choose in the future, SB 1440 undercuts cost reduction potential, choice and future consumers benefits.

Limiting a new RG procurement program to just biogas is akin to the Legislature picking technology winners and losers. These limits will ultimately severely limit the emission reduction potential for any SLCP or GHG statewide RG procurement program. It would have been inconceivable for the Legislature to apply the same logic to the RPS when passed in the early 2000s, e.g. choosing a RPS solely for wind energy, excluding solar or other technologies just on the basis of their cost at the time. This would have not recognized the tremendous cost reduction potential at scale, which solar has seen, and which similarly can be expected for renewable gas production like hydrogen.

Existing State Policy Will Lead to Greater Emissions Reductions

The Air Board and CPUC currently have broad authority to include all renewable gases in any new program they choose to initiate. SB 1440 sends the wrong signal and sets a course for a biogas-only program which excludes other important renewable gases that have significant emission reduction potential from large-scale gas utility procurement. Since the 2016 SLCP bill passed, stakeholders have been working with the ARB and the CPUC to discuss the policy framework to implement a comprehensive renewable gas procurement and production program that goes beyond just biogas and biomethane.

SB 1440 moves the 2016 SLCP policy backward and constricts the potential for the highest possible SLCP emission reductions that may result from an RG procurement program the state is attempting to create at energy agency and climate agency levels. Unless it is amended to include other forms of renewable gas, SB 1440 will undercut this progress and send the wrong signal to the agencies that any statewide renewable gas program shall be limited to only biogas and biomethane.

Hydrogen as a Versatile Tool to Implement CA's Climate, Air Quality and Energy Goals

Renewable hydrogen, including electrolytic hydrogen produced with renewable electricity, can play a significant role in addressing the goal of decarbonizing the gas system, address criteria air pollution and reduce GHG in the energy sector, including electricity and transportation. As a fuel for fuel cell electric vehicles, renewable hydrogen does not create criteria pollutants (i.e. are "zero emission") or carbon emissions. Stationary fuel cells utilizing hydrogen or other renewable gases at industrial and commercial facilities are virtually zero emission power sources supplying valuable local reliable renewable power 24/7.

Developing an increased supply of zero or negative carbon hydrogen for utilities is aligned with state policy and environmental goals. Increased hydrogen availability in disadvantaged communities would increase usage in both the transportation and electricity sector. The air pollution burden and the carbon emissions would be greatly reduced, directly benefiting the most affected California residents.

Including renewable hydrogen would have furthered the zero-emissions goals of California's transportation and energy by expanding the renewable gas supply for utilities.

For all of these reasons, and absent amendments addressing our significant concerns, we must regretfully oppose SB 1440 and urge committee members to vote no.

Sincerely,



Emanuel Wagner

Deputy Director

California Hydrogen Business Council

ⁱ The CHBC is a California industry trade association with a mission 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, 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.