



Chairman Mary Nichols and Board Members  
California Air Resources Board  
1001 I St #2828  
Sacramento, CA 95814

April 22, 2020

**Re: Supporting Green Electrolytic Hydrogen**

Dear Chair Nichols and CARB Board Members:

We write to encourage you to increase the agency's focus on green electrolytic hydrogen as a key climate and clean energy solution that can uniquely help decarbonize all sectors. Specifically, our hope is that the Board will consider laying out a formal road map for development and utilization of green electrolytic hydrogen in the next Scoping Plan update, recognize green electrolytic hydrogen as a zero carbon resource for the purposes of SB 100 (De Leon, 2018), and continue to identify ways to increase the use of green hydrogen as a clean energy storage mechanism and a clean vehicle and industrial fuel.

Green electrolytic hydrogen has great potential to electrify all sectors with renewable energy. It has the capacity to fuel cars, big-rig trucks, and even jet airplanes. It can power factories and industry, decarbonize fertilizer and agriculture and serve to store surplus solar and wind power for use during those times renewable power sources have lower generation. Green electrolytic hydrogen can also provide zero-carbon, firm and dispatchable power to help us retire old coal and natural gas power plants, and displace fossil fuels in a variety of other uses.

Recent changes in the economics of creating green electrolytic hydrogen have resulted in it now being far more cost-effective as a climate solution. Bloomberg New Energy Finance (BNEF) suggests that [costs for green electrolytic hydrogen could fall by 80 percent](#) over the next decade. The Hydrogen Council data indicates that costs will fall sharply, and quicker than expected, such that hydrogen – including green electrolytic hydrogen – [will be a cost-competitive clean energy solution across a wide array of applications by 2030](#). The international bank HSBC also expects significant cost declines over the next decade, [specifically noting](#): “We see the runaway growth of wind and solar creating a rising excess of power over the next decade that could be used to produce clean hydrogen for zero power cost.”

This makes it an ideal time for state entities, such as CARB, to begin planning for how green electrolytic hydrogen can help the state meet our climate, energy, and clean air goals. Sending strong market signals – as the state has done for solar, wind, and battery power – that green electrolytic hydrogen is a desirable clean fuel will help ensure its optimal utilization. By supporting green electrolytic hydrogen, and its use in

all sectors, the state can more quickly and cost-effectively establish a path to achieving climate neutrality and net-negative emissions than is currently envisioned.

In the face of the COVID-19 crisis, rapid deployment of clean energy projects can also be an effective tool to revitalize the economy. A near-term focus on green-electrolytic hydrogen could help create new, strategic clean energy and industry hubs in California that could support near-term and long-lasting job growth.

The legislature has already, and repeatedly, directed state agencies to support the development and use of green electrolytic hydrogen, including through SB 1369 (Skinner, 2018). Before the outbreak of COVID-19 in California, we authored additional legislation (SB 1122 and AB 3159) further directing CARB to promote green electrolytic hydrogen. With the disruption to the legislative process, bills that are not specific to the COVID-19 crisis may have an uncertain path in this 2020 legislative year. Fortunately, CARB and other state agencies need no additional legislative authority to implement measures to support near-term and ongoing growth of the green electrolytic hydrogen sector in California.

We encourage CARB and other agencies to take steps to fulfill these existing directives, those included in the bill concepts above, and others that could put California on a faster path to its clean air and climate objectives, while providing an important source of near-term and ongoing job growth. Thank you for your attention to this matter.

Sincerely,



**Nancy Skinner**  
State Senator, SD-09



**Bill Quirk**  
State Assembly Member, AD-20