FCHEA
Fuel Cell & Hydrogen Energy Association

September 12, 2022

Chair Liane M. Randolph
California Air Resources Board
1001 I Street
Sacramento, CA 95814

FCHEA Comment Regarding Proposed 2022 State Strategy for the State Implementation Plan

Dear Chair Randolph:

The Fuel Cell and Hydrogen Energy Association (FCHEA) appreciates the opportunity to provide comment on the California Air Resources Board's (CARB) proposed 2022 State Strategy for the State Implementation Plan. FCHEA supports CARB's efforts to increase the deployment of zero-emission fuel cell electric vehicles (FCEVs) and hydrogen fueling infrastructure. In particular, we greatly support the additional focus on support for medium- and heavy-duty hydrogen-powered vehicles.

FCHEA is the national industry association representing over eighty-five leading companies and organizations advancing innovative, clean, safe, and reliable hydrogen energy technologies and solutions. FCHEA's members represent the entire global supply chain of the fuel cell and hydrogen industry including fuel cell and electrolyzer stack and system manufacturers, component suppliers, vehicle manufacturers, aviation companies, hydrogen producers, fuel distributors, utilities, end-users, and more.

The U.S. economy and energy sector are at a crossroads as we face tough challenges around how to reduce emissions, manage our domestic resources, build resiliency, and maintain U.S. competitiveness. Fuel cell and hydrogen technologies will be a critical component in overcoming these obstacles.

Importance of Hydrogen Transportation

The future greening of our transportation system will require electrification – which will include both battery electric vehicles (BEVs) and hydrogen-powered fuel cell electric vehicles (FCEVs).[1] With the wide variety of commercial applications and requirements, one sole technology will not meet the demands of all.

For medium and heavy-duty vehicles in particular, such as trucks and buses, hydrogen fuel cells are well suited due to their fast refueling time and long driving range.[2] Fuel cells also excel due to their scalability, allowing for decarbonization to advance in a sector where batteries may face difficulties due to scalability, weight, and hours-long recharging times.

[1] California Air Resources Board. (2020). *2020 Mobile Source Strategy*.
[2] California Fuel Cell Partnership. (2018). *The California Fuel Cell Revolution*.

Hydrogen Transportation and Decarbonization

Fuel cell technologies and hydrogen energy are being increasingly viewed as essential decarbonization options across the United States and around the world for a wide range of sectors, particularly for hard-to-abate sectors like medium- and heavy-duty transportation. The *Road Map to a US Hydrogen Economy* found that the sector has the potential to reduce national NO_x and tailpipe emissions by 36% by 2050, a significant win for mitigating climate change and improving public health.[3]

Hydrogen also has significant potential to promote environmental justice. Using hydrogen as a fuel or energy source in combination with fuel cells produces no NO_x, SO_X, and particulate matter that directly affect corridor adjacent communities. For example, replacing heavy-duty trucks, port equipment, buses, vans, and other vehicles with zero-emission fuel cell electric options would significantly reduce harmful pollutants and noise in these communities, improving local air quality and public health. These medium– and heavy-duty vehicles are especially important from an environmental justice standpoint as our nation's highways often cut through disadvantaged and minority communities.

By supporting the deployment of zero-emission FCEVs and hydrogen fueling infrastructure, California will continue to be a leader in driving transportation decarbonization. According to CARB's 2021 Hydrogen Self-Sufficiency Analysis, additional funding of $300 million will enable the self-sufficiency of California's light and medium-duty hydrogen fueling infrastructure network.[4] FCHEA strongly supports the funding of $300 million in the 2022-23 state budget to support the development and self-sufficiency of hydrogen infrastructure. This requested funding will support the expansion of 1,000 hydrogen fueling stations in California, providing fueling access for 97% of disadvantaged communities and 94% of California. The hydrogen and fuel cell sector looks forward to helping the Golden State achieve its long-term air quality, public health, and climate goals.

Thank you for your consideration. Should you wish to discuss these comments further, I can be reached at any time by email at fwolak@fchea.org or by phone at (202) 355-9463.

Sincerely,

Frank Wolak
President & CEO
Fuel Cell and Hydrogen Energy Association

[3] Fuel Cell & Hydrogen Energy Association. (2020). *Road Map to a US Hydrogen Economy: Reducing Emissions and Driving Growth Across the Nation*.

[4] California Air Resources Board. (2021). *Hydrogen Station Network Self-Sufficiency Analysis per Assembly Bill 8*.