

<b>DOCKETED</b>	
<b>Docket Number:</b>	20-IEPR-02
<b>Project Title:</b>	Transportation
<b>TN #:</b>	234003
<b>Document Title:</b>	Energy Independence Now Comments on IEPR Update Workshops on Hydrogen Supply, Infrastructure, and Fuel Cell Vehicle Market
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Energy Independence Now
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	7/23/2020 3:34:15 PM
<b>Docketed Date:</b>	7/23/2020

*Comment Received From: Energy Independence Now  
Submitted On: 7/23/2020  
Docket Number: 20-IEPR-02*

**Energy Independence Now Comments on IEPR Update Workshops  
on Hydrogen Supply, Infrastructure, and Fuel Cell Vehicle Market**

*Additional submitted attachment is included below.*



energy independence now

July 22, 2020

California Energy Commission  
Dockets Office, MS-4  
Docket No. 20-IEPR-02  
1516 Ninth Street  
Sacramento, CA 95814-5512

### **EIN Comments on IEPR Update Workshops on Hydrogen Supply, Infrastructure, and Fuel Cell Vehicle Market Status**

Energy Independence Now (EIN) appreciates the opportunity to comment on the IEPR Update workshops focused on hydrogen supply, infrastructure and fuel cell vehicle market status on July 2nd. EIN is an environmental nonprofit organization which advocates for zero-emission fuel cell electric vehicles (FCEVs) and renewable hydrogen infrastructure. EIN was a main architect of the California Hydrogen Highway Initiative, and is the only environmental nonprofit organization focused on advocating for FCEVs. EIN supports the investment the California Energy Commission has provided to projects aimed at reducing greenhouse gas emissions, improving air quality, and mitigating California's petroleum dependency. In particular, we would like to highlight the following:

#### **1. Inclusion of both Hydrogen Fuel Cell Vehicles (FCEVs) and Battery Electric Vehicles in the 2020 IEPR Update:**

As the call for cleaner and healthier air for our most vulnerable communities becomes heightened, so does the importance of continued investment in hydrogen fuel cell vehicles and fueling infrastructure. The unparalleled ramifications of the COVID-19 virus, in tandem with a population already disproportionately affected by particulate matter and pollution, is an undeniable rallying cry for us to integrate all possible zero-emission options to adequately address the health and safety of our community. In order for California to meet its ambitious ZEV deployment and greenhouse gas reduction goals, low- and middle-income households, particularly in disadvantaged communities, must also be supported and encouraged to purchase ZEVs and/or to participate in ZEV car-sharing programs. Such communities, however, often face increased barriers to ZEV adoption due to factors that include cost and charging availability (many live in multi-unit housing developments, which are less likely to have charging infrastructure). Wider access to zero-emission options, along with the integration of hydrogen

fuel cells amongst bus fleets, trucks and heavy-duty vehicle classes, will prove to be a necessary approach to successfully address our State's health and pollution crisis.

Hydrogen fuel cell vehicles are a key part of the zero-emission future of California, and should play a complementary role to BEVs as we continue forward. We hope this information will be included in the 2020 IEPR Update and incorporated into its recommendations.

## **2. Economic Impact**

The onset of COVID-19 and the ensuing lockdown has altered our world's trajectory, forcing leaders to address the current state of the economy alongside the health of their citizens. Millions of Americans have lost their jobs and job creation will prove vital not only in getting people back to work, but returning to any semblance of normalcy. The key role of clean energy jobs should not be overlooked. As we shift toward clean energy infrastructure, research and development, training and execution of these new jobs will be crucial to this transition's success and to the continued livelihood of millions of Americans.

In 2018, we published the Renewable Hydrogen Roadmap (<https://einow.org/rh2roadmap>) which summarizes the economics of renewable hydrogen. A glimpse into an Energy Commission solicitation for renewable hydrogen production shines light on the potential job creation opportunity and economic impact of the public and private sector investments. As noted in our report, "the \$4 million solicitation covers up to 75% of total project cost, requires a minimum daily production capacity of 1,000/kg or about 1/30th of the daily transportation demand for hydrogen that CARB anticipates by 2022. Thus, a roughly \$120m investment would be necessary to fully meet FCEV fuel demand in the short time frame. Without including distribution and feedstock development, this investment would create approximately 1,725 jobs in the next 5 years using American Recovery and Reinvestment Act (ARRA) methodology."

As carbon-neutrality deadlines loom, global entities are increasingly turning toward renewable hydrogen.<sup>1</sup> These international projects and in-depth research have proven the facility and capacity of hydrogen infrastructure, as well as the return on investment from both private and public sectors.<sup>2</sup> By partnering with and collaborating on such projects, California will be in a highly favorable position, with the opportunity to continue to lead the country in our own carbon-neutrality and zero-emission goals. Our hope is that the CEC will look beyond our state lines and what is feasible at this exact moment, and instead bravely look toward a future that is attainable with adequate commitment, passion and investment.

The hydrogen revolution isn't simply a California experiment, rather a vital part of our clean energy future. California simply will not meet its clean transportation goals without a successful market for FCEVs. We can achieve our collective goals, but we must first fully integrate FCEV

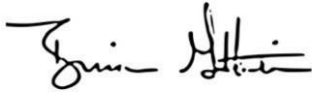
---

<sup>1</sup> [https://ec.europa.eu/energy/sites/ener/files/hydrogen\\_strategy.pdf](https://ec.europa.eu/energy/sites/ener/files/hydrogen_strategy.pdf)

<sup>2</sup> [Path to hydrogen competitiveness A cost perspective](#)

into the broader ZEV definition, look toward successful demonstrations and investments occurring throughout Europe and Asia, and continue to helm this movement forward together. This market is poised for success and California's continued investment in and support of the FCEV market will enable the State to meet its environmental and air quality goals while unlocking billions of dollars in investment in our clean energy future.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brian Goldstein". The signature is fluid and cursive, with a prominent initial "B" and a long, sweeping underline.

Brian Goldstein  
Executive Director, Energy Independence Now