

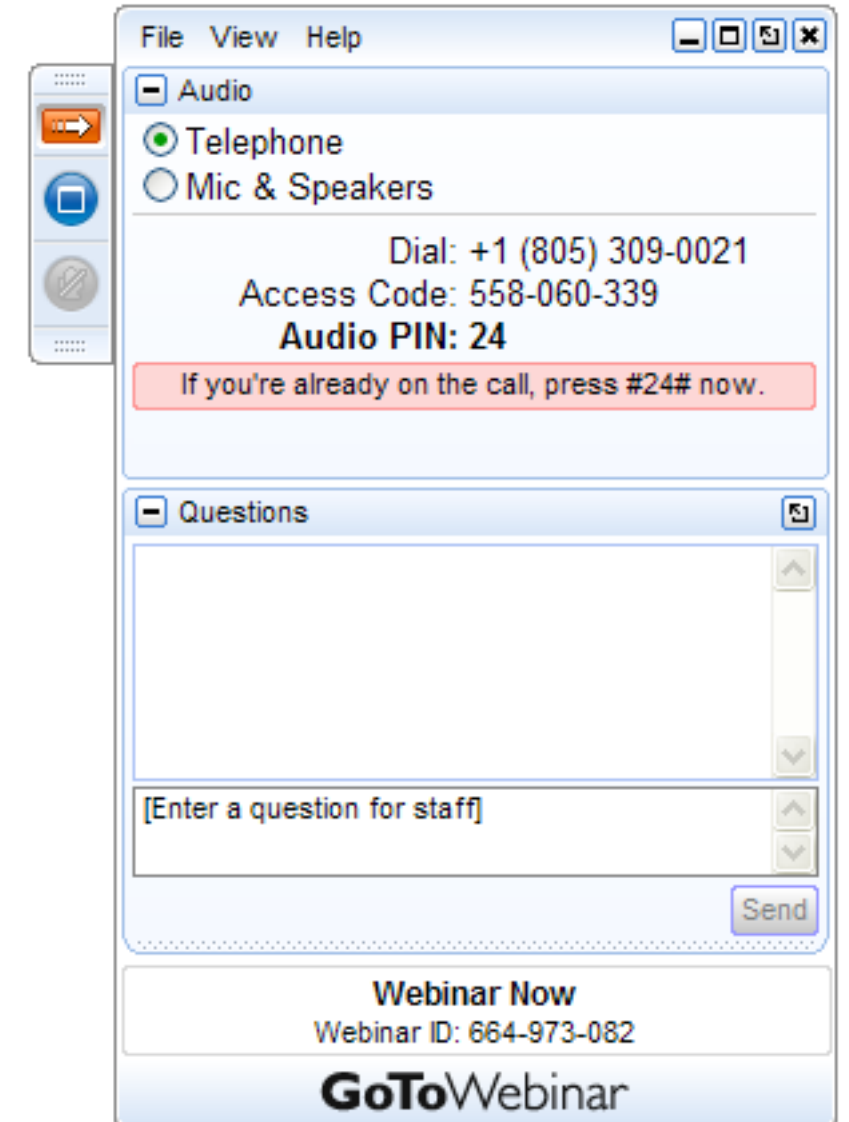


# **CHBC BRIEFING - 200 HEAVY DUTY HYDROGEN STATIONS BY 2035, AND A ROADMAP FOR HYDROGEN FUELING CORRIDORS**

JANUARY 6, 2022

# HOUSEKEEPING

- Troubleshooting
  - Contact Emanuel Wagner | [ewagner@californiahydrogen.org](mailto:ewagner@californiahydrogen.org)
- Question & Answers
  - Ask questions using the **Questions Panel** on the right side of your screen.
- Recording & Slides
  - The recording of the briefing and the slides will be available after the event. Registrants will be notified by email.
- Seeking your Feedback
  - Please take our 30 second survey at the conclusion of the briefing



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# THANK YOU TO OUR BRIEFING SERIES SPONSORS

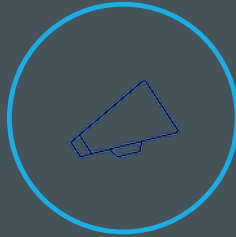
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**ADVOCACY**



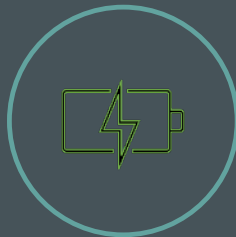
**GOODS  
MOVEMENT,  
HEAVY-DUTY  
TRANSPORT, AND  
CLEAN PORTS**



**PUBLIC  
TRANSPORTATION**



**ENERGY STORAGE  
AND RENEWABLE  
HYDROGEN**



**CALIFORNIA HYDROGEN  
BUSINESS COUNCIL**

■ **Our Vision:**

- CHBC is committed to advancing the commercialization of hydrogen in the energy and transportation sectors to achieve California's climate, air quality, and decarbonization goals.

■ **Our Mission:**

- Provide clear value to our members and serve as an indispensable and leading voice in promoting the use of hydrogen in the utility and transportation sectors in California and beyond.

■ **Our Principals:**

- Leadership, Integrity, Teamwork and Inclusion.

■ **Our Objectives:**

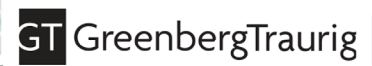
- Enhance market commercialization through effective advocacy and education of policymakers and policy influencers
- Be "the" trusted "go to" resource on Hydrogen and Fuel Cell technology for policymakers and policy influencers
- Accelerate market growth via networking opportunities and information exchange for the industry and its customers

# OUR MEMBERS

## CHBC Platinum Members



## CHBC Gold Members



## Silver



## Innovator



# VALUE IN MEMBERSHIP

- Active representation in all relevant California policy making venues
- A trusted and knowledgeable industry resource
- Access to policymakers, policy influencers and industry
- Track record of success
- Platform for industry collaboration
- Learn more:  
[www.californiahydrogen.org](http://www.californiahydrogen.org)



BECOME A MEMBER AND MAKE A DIFFERENCE  
TOGETHER WE CAN INFLUENCE PUBLIC POLICY AND GROW YOUR BOTTOM LINE

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## **UPCOMING VIRTUAL BRIEFINGS:**

### **JANUARY 13 - CONVERSION OF NATURAL GAS PIPELINES TO HYDROGEN AND HYDROGEN BLENDING – OPTIONS TO DECARBONIZE THE GAS GRID**

- With an ever increasing focus on decarbonizing the gas grid, blending hydrogen into the gas grid and converting gas pipelines to hydrogen are becoming options that are being considered in the U.S. and implemented in other countries. This panel will discuss why California is lacking to take action, what other countries are doing, and why hydrogen pipelines are an option to keep the costs of transitioning to a renewable energy economy manageable.

**UPCOMING:**



# **CALIFORNIA HYDROGEN LEADERSHIP SUMMIT**

- **KICK-OFF RECEPTION: JANUARY 31, 2022**
- **CONFERENCE: FEBRUARY 1, 2022**
- **SHERATON GRAND HOTEL, SACRAMENTO, CA**

The California Hydrogen Leadership Summit will explore the policies, programs and incentives needed in 2022 to accelerate production, use, and storage of hydrogen, which is essential to California's ability to meet emissions goals and address climate protection, air quality, energy resilience and sustainable economic growth needs.

Join leaders from the energy sector, transportation, industry, academia and representatives from California state government, including legislative and administrative staff responsible for implementing climate change, air quality, energy diversity and conservation policies.

**DETAILS & REGISTRATION AT: [HTTPS://WWW.CAHYDROGENLEADERSHIPSUMMIT.COM/](https://www.cahydrogenleadershipsummit.com/)**

# WEBINAR SPEAKERS



**Senator Bob Archuleta**  
California State  
Senate



**Nico Bouwkamp**  
*Technical Program  
Manager*  
California Fuel Cell  
Partnership



**Kim Okafor**  
*General Manager of  
Zero Emission  
Solutions*  
Trillium



**Ryan McGeachie**  
*CCO, Global Head of  
Infrastructure and  
Commercial  
Operations*  
Nikola Motors



**Tim Sasseen**  
*Market  
Development  
Manager, US,*  
Ballard Power  
Systems



**Parker Meeks**  
*Chief Strategy  
Officer*  
Hyzon Motors

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## KEYNOTE SPEAKER



**Senator Bob Archuleta**  
California State Senate

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## KEYNOTE SPEAKER



**Nico Bouwkamp**  
*Technical Program Manager*  
California Fuel Cell Partnership



1/6/2022

# Fuel Cell Electric Trucks

Fuel is the Lifeblood of Freight Movement





# California Hydrogen Briefing Series

- **Nico Bouwkamp**, CaFCP\*
- **James Kast**, Toyota\*
- **David Edwards**, Air Liquide
- **Jordan Truitt**, Air Liquide
- **Gia Vacin**, Governor's Office of Business and Economic Development
- **Mike Kashuba**, Governor's Office of Business and Economic Development
- **Tom Mourmouras**, Shell
- **Lisa Mirisola**, SCAQMD

\* Team lead & staff lead



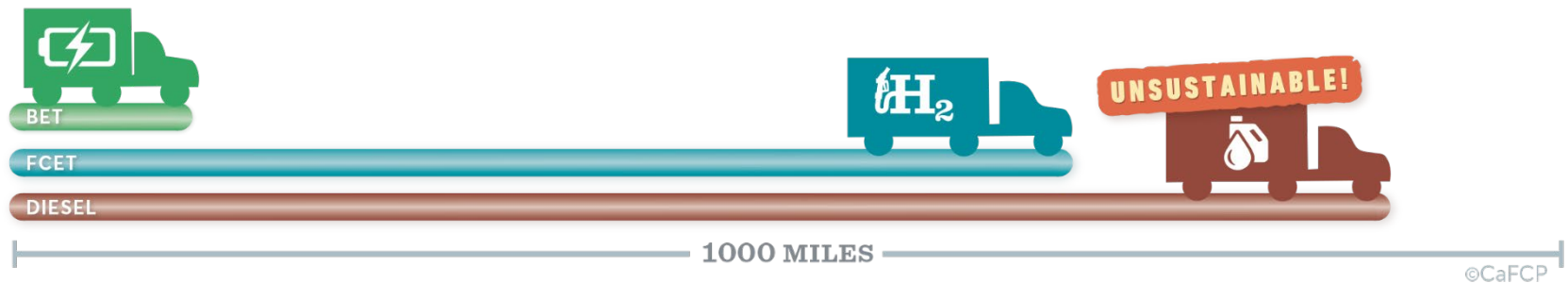
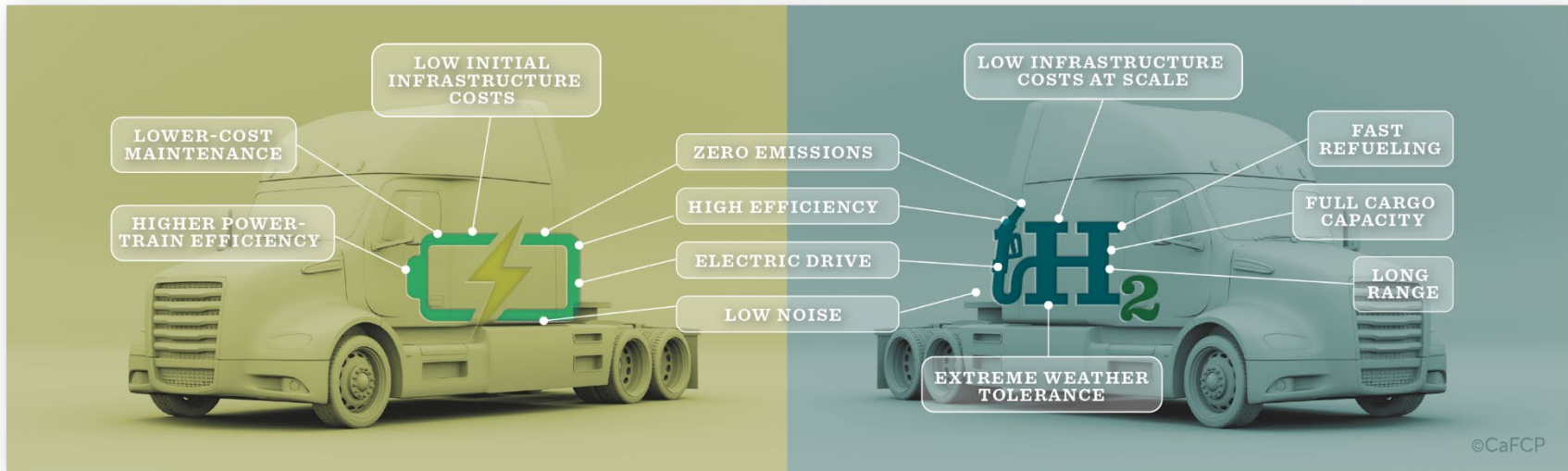
## FUEL CELL ELECTRIC TRUCKS

# A Vision for Freight Movement in California —and Beyond

Presented by the California Fuel Cell Partnership | July 2021



# Fuel Cell Electric Trucks are Essential





## A California Vision

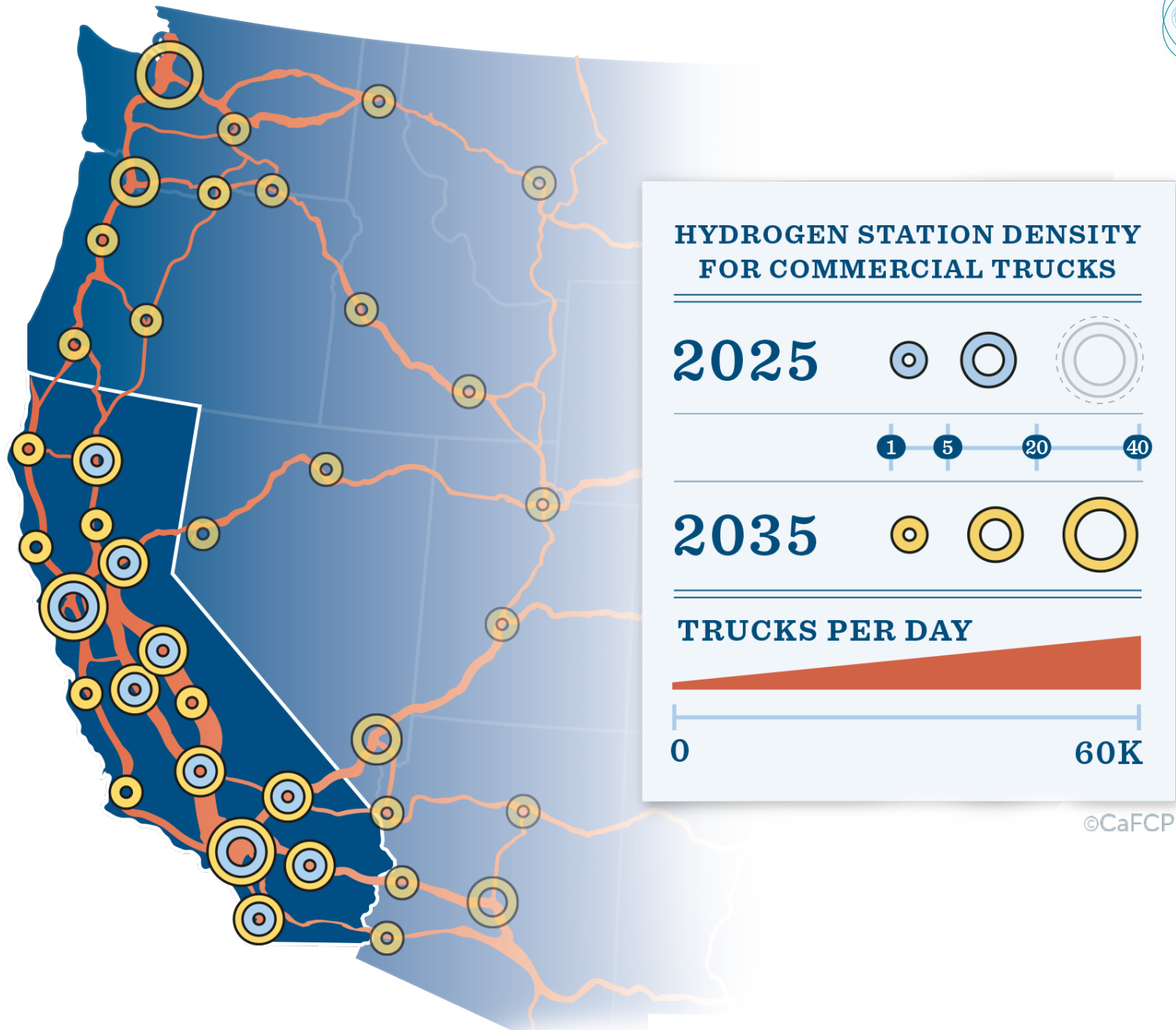
- ✓ 70,000 trucks
- ✓ 200 stations
- ✓ By 2035
- ✓ Policies that unlock and *accelerate* private investment



HYDROGEN STATION DENSITY  
FOR COMMERCIAL TRUCKS

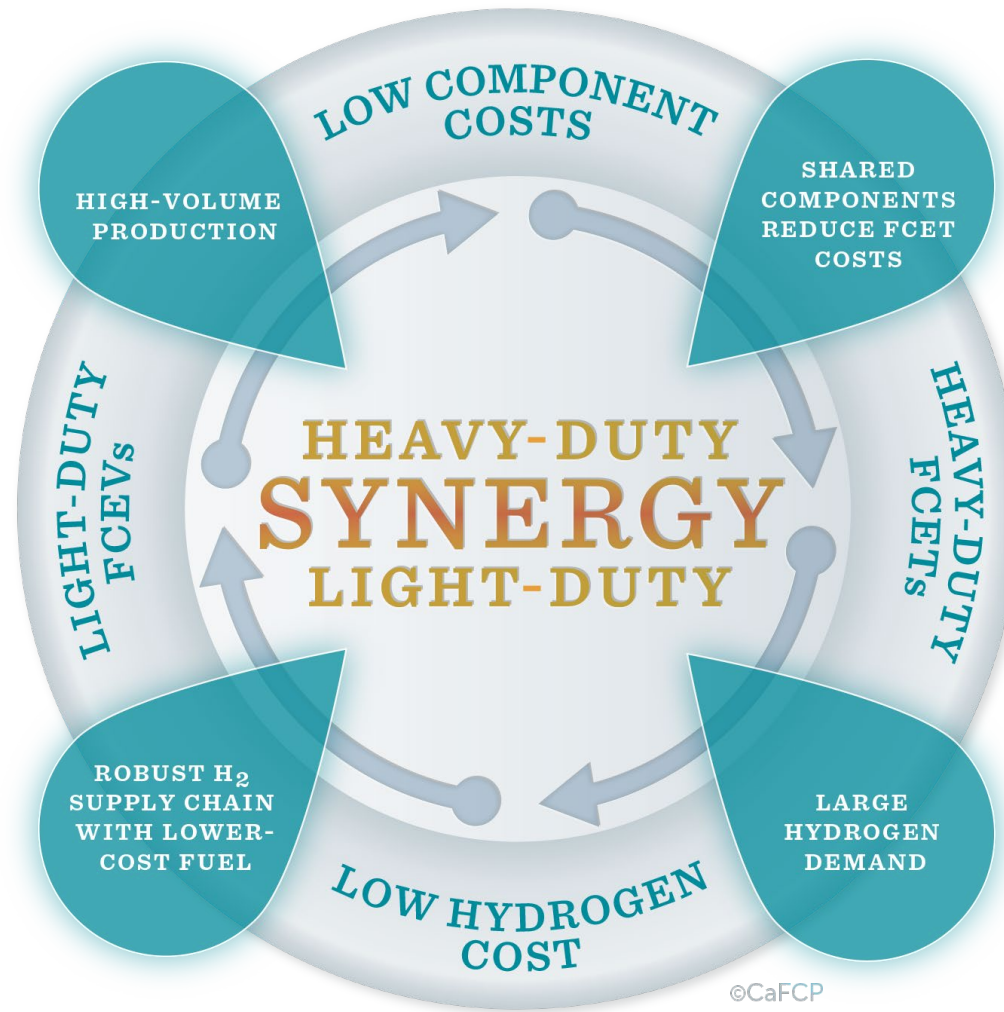
2025







# Light duty needs heavy duty. And vice versa.





- ✓ Fuel cell electric trucks are an essential part of the heavy-duty solution
- ✓ We need to start investing **NOW**
- ✓ The right policies are needed: *predictable* and **long-term**
- ✓ Policies must support trucks, pumps and fuel



“Battery-electric trucks, fuel cell-electric trucks, and the supporting infrastructures will improve over time with appropriate investments, yet to truly realize a successful 100 percent, zero-emission transition requires the unique capabilities of FCETs.”



[info@cafcp.org](mailto:info@cafcp.org)

[cafcp.org](http://cafcp.org)



*Powered by the fastest molecule on earth!™*



## —Resources—

[www.cafcp.org](http://www.cafcp.org)



Learn more about heavy-duty fuel cell electric trucks and more at on the CaFCP website

### **Truck vision**

[www.cafcp.org/truckvision](http://www.cafcp.org/truckvision)

### **Truck vision news release**

<https://cafcp.org/blog/california-fuel-cell-partnership-envisions-70000-heavy-duty-fuel-cell-electric-trucks-supported>

### **Resources database**

[www.cafcp.org/resources](http://www.cafcp.org/resources)

Reports, studies and other documents related to fuel cell electric vehicles and hydrogen.

### **News**

[www.cafcp.org/news](http://www.cafcp.org/news)

News related to hydrogen, fuel cells, mobility and more.

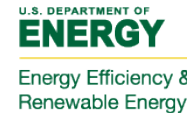
### **Events**

[www.cafcp.org/events](http://www.cafcp.org/events)

Public events, online briefings and webinars related to all things hydrogen.



# CaFCP Members



— 20+ years of collaboration —

# PANEL DISCUSSION

- Submit your question in the Q&A Panel on your right.



**Nico Bouwkamp**  
*Technical Program  
Manager*  
California Fuel Cell  
Partnership



**Kim Okafor**  
*General Manager of  
Zero Emission  
Solutions*  
Trillium



**Ryan McGeachie**  
*CCO, Global Head of  
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Nikola Motors



**Tim Sasseen**  
*Market  
Development  
Manager, US,*  
Ballard Power  
Systems



**Parker Meeks**  
*Chief Strategy  
Officer*  
Hyzon Motors

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Deputy Director

California Hydrogen Business  
Council

[ewagner@californiahydrogen.org](mailto:ewagner@californiahydrogen.org)

## SEEKING YOUR FEEDBACK

Please take our 30 second survey at the conclusion of the briefing

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