

### May 29-30, 2024 Los Angeles, California Los Angeles Convention Center

#### Overview

With California set to receive up to \$1.2 billion from the U.S. Department of Energy to accelerate the development and deployment of clean renewable hydrogen. California will now play a critical role in the development of a hydrogen economy with innovators in production processes and pioneers in fuel cell technology to lower heavy duty truck emissions, power public transportation and port operations, as well as create thousands of jobs in a massive boost to the state's economic development.

As the largest event in California showcasing hydrogen as a key enabler to reach net-zero emissions by 2030, the California Hydrogen Convention will position the state as a domestic and global hydrogen superpower.

The California Hydrogen Convention will bring together leaders from across government, industry, labor unions, national labs, NGOs, and more to jumpstart the market for hydrogen and establish a powerful ecosystem that will reduce emissions and serve as a catalyst for addressing climate change.

With an exhibition showcasing the latest technologies and services complementing a industry leading strategic conference, in-depth technical sessions and workshops, this event will serve as a platform for expediting the path to achieving the state's progressive climate goals, while creating partnerships and business development for companies and organizations involved in hydrogen projects, policymaking and driving the industry forward.





### Day One, May 29, 2024

### 10:00

### Welcome from State Representatives; Tribal Chiefs and the Conference Co-Hosts

Patricia Monahan, Commissioner, California Energy Commission

Eric Guter, VP Hydrogen for Mobility, Air Products

### 10:30

### **Keynote Fireside Chat with Air Products**

Eric Guter, VP Hydrogen for Mobility, Air Products

### 10:45

### Overview of the H2Hubs program

Angelique Besnard, Stakeholder Engagement Specialist, Office of Clean Energy Demonstrations, U.S. Department of Energy

### 11:00

### Keynote Opening Plenary: Update on The Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES)

- Exploring Arches and examining California's leadership, and efforts on developing hydrogen infrastructure
- Accelerating hydrogen's contribution to decarbonizing the California's economy and building on California's long-standing hydrogen and renewable energy leadership
- Highlighting California's cutting-edge policies, and green energy ecosystem to highlight why the State is the best place to develop a hydrogen hub
- What will be the economic impact of Arches on the green economy and job creation?

### Angelina Galiteva, CEO, Arches

Tyson Eckerle, Senior Advisor for Clean Infrastructure and Mobility, California Governor's Office of Business & Economic Development (GoBiz)

### 11.30

### Past, Present, and Future of Hydrogen at NASA

Angela Krenn, Technical Integration Lead and Principal Technologist, NASA

### 11.45

Fireside Chat: The First Net Zero Energy City: What is Hydrogen's Role in Moving Beyond Net Zero





R. Rex Parris, Mayor, City of Lancaster

### 12:00

### **Lunch and Exhibition Visit**

### 1:30

### California: On the Precipice of Becoming a Global Hydrogen Leader

- Creating a network of hydrogen producers, consumers, and infrastructure to accelerate the use of hydrogen in multiple carbon-intensive sectors.
- What is the latest on California's hydrogen market development strategy to accelerate clean energy deployment and decarbonizing transportation sector and heavy industrial emitters
- What State agencies will be involved and what will be there roles and responsibilities
- How will the state of California engage relevant stakeholders, including local communities, to advance equity and deliver environmental and economic benefits
- What do the economics and procurement look like when shifting to a hydrogen economy?

Moderator: Alice Hildick, Head of Operations, Onward

Patricia Monahan, Commissioner, California Energy Commission

Hilary Norton, Commissioner, California Transportation Commission

Eric Guter, VP Hydrogen for Mobility, Air Products

Stephen Cheung, CEO, Los Angeles Economic Development Corporation

Tyson Eckerle, Senior Advisor, Clean Infrastructure and Mobility, California Gov's Office of Business & Economic Development (GoBiz)

### 2:15

# Fueling the Future: How Advancements in Hydrogen Technology will Reshape the Transportation Sector

Transport accounts for around one-fifth of global  $CO_2$  emissions with three-quarters of the emissions generated derived from road transport in the form of private passenger vehicles such as cars and buses. Electric vehicles (EVs) have helped lower global emissions. However, limited driving ranges, higher costs, and the impacts on the electrical grid have limited their adoption. Recent advancements in hydrogen technology have helped power a new generation of vehicles.

Attendee insights: Understand hydrogen's role in decarbonizing heavy emitting vehicles and aviation, and examine which vehicles are best suited for hydrogen, and assess how long mass-scale adoption will take and strategies to expedite.

Moderator: Grace Quan, President and CEO, Hydrogen in Motion Inc. (H2M)





Orville Thomas, CEO, California Mobility Center

Val Miftakov, CEO, ZeroAvia

Cory Shumaker, Director, Business Development, Hyzon

Ryan Harty, Assistant Vice President and Division Lead, Sustainability Development Division, American Honda Motor Co. Inc. (AHM)

Nicolas Pocard, Vice President Marketing & Strategic Partnerships, Ballard

3:15

### Lessons Learned from Canada's First Hydrogen Hub

With plans underway for more than 25 projects related to the production, transportation and end use of hydrogen, and carbon capture and storage, the HUB will put the Edmonton Region on a path to net-zero and help create a future for the energy industry. It will also put the region, Alberta and Canada on track to be global competitors and leaders in the production and export of low-carbon hydrogen. But most importantly, the Edmonton Region Hydrogen HUB will serve as a blueprint for how other regions across the country can also take advantage of the hydrogen opportunity and join forces to build a strong Canadawide hydrogen economy.

Brent Lakeman, Director, Hydrogen Initiative, Edmonton Global

3:30

### **Networking and Coffee Break**

4:00

### Building the Future: Hydrogen Infrastructure Development in California

- Examining the current state of hydrogen infrastructure in California including refueling stations and pipelines, in California.
- What are the challenges faced in expanding hydrogen infrastructure and the opportunities it presents for the state's economy and environment.
- Explore the growth of hydrogen refueling stations, their distribution, accessibility, and plans for expansion.
- Discuss the potential for hydrogen pipelines to transport hydrogen across California and connect production centers to demand centers.
- Share insights into funding mechanisms, investment opportunities, and financial support for hydrogen infrastructure projects.
- What is the long-term vision for hydrogen infrastructure in California and plans for expansion and innovation.

Attendee insights: This panel discussion would provide attendees with valuable insights into the challenges, opportunities, and strategies related to hydrogen infrastructure





development in California, fostering dialogue among experts, policymakers, and industry leaders to accelerate its growth.

Moderator: Roxana Bekemohammadi, Founder and Executive Director, United States Hydrogen Alliance

James Kast, Senior Director, Hydrogen Business Development, Iwatani Corporation of America

Chris DiGiovanni, Manager, GHG Emission Strategies, Gas Strategy Execution & System Planning, PG&E

Patrick Goodman, Technical Fellow, Fluor

Kirk Hamilton, Senior Engineering Advisor, CFER Technologies

Salim Rahemtulla, President and CEO, PowerTap Hydrogen Fueling Corp

5:00: Closing Remarks from the Chair

### Conference Day 2, May 30, 2024

9:30

### Keynote Fireside Chat: How Carbon Management Can Enable the Growth of Hydrogen

Moderator: Elliot Anise-Hicks, Chief Technology Officer & Co-Founder, Oberon Fuels

Mark Ackiewicz, Deputy Assistant Secretary, Office of Fossil Energy and Carbon Management, Depart of Energy, United States Government

9:45

### Fireside Chat: The Hub of Transportation Technology for Tomorrow

Moderator: Bill Erick, Executive Director, Hydrogen Fuel Cell Partnership

Orville Thomas, CEO, California Mobility Center

10:00

### Exploring Clean Hydrogen Production: Advancements and Opportunities in California

- What is the current state of hydrogen production in California including electrolysis and natural gas to hydrogen
- How are renewable energy sources being integrated into hydrogen production processes in California, and what are the challenges and opportunities?
- Innovation in hydrogen production technologies to reduce cost of hydrogen production
- Overview of government policies, incentives, and funding opportunities promoting the development and adoption of hydrogen production technologies in California.





- Identifying the key challenges facing hydrogen production in California and discussing strategies for overcoming them. Also, exploring the long-term prospects for hydrogen as an energy carrier.
- Highlighting successful collaborations between industry, research institutions, and government agencies in advancing hydrogen production technologies.

Attendee insights: This panel discussion will provide attendees with a comprehensive understanding of the various hydrogen production technologies, their applications, and the role they play in California's energy landscape. It would also promote dialogue among experts, policymakers, and industry leaders to accelerate the growth of the hydrogen sector in the state.

Moderator: David Mercer, Director of Technology, Energy Solutions, Fluor

Anna Caballero, State Senator, 14th District, California State Senate

Larry Tree, CEO, Proteum Energy

Ian Dunderdale, Chief Operating Officer, Element Resources

Raveel Afzaal, CEO, Next Hydrogen

10:45

# Navigating Green Waters: Hydrogen's Role in Decarbonizing Port Operations in California

- Exploring the development and adoption of hydrogen fuel cell-powered ships and their impact on maritime emissions reduction
- Deploying hydrogen refueling stations and distribution networks within ports.
- What collaborations are required in order for hydrogen adoption in port adoptions tp be successful? What is the economic feasibility?
- Identifying the key challenges and solutions in integrating hydrogen into port operations, such as infrastructure development and safety considerations.
- Showcasing successful case studies or pilot projects that have demonstrated the feasibility and benefits of hydrogen in port operations

Attendee insights: This panel discussion would provide valuable insights into how hydrogen can help reduce emissions and enhance sustainability in port operations, fostering dialogue among experts, port authorities, shipping companies, technology providers, and government representatives.

Mario Cordero, CEO, Port of Long Beach

David Libatique, Deputy Executive Director, Stakeholder Engagement, Port of Los Angeles

Kristi McKenny, Chief Operating Officer, Port of Oakland

Pace Ralli, CEO, SWITCH Maritime LLC





11:15

### Collaboration and Partnerships in Advancing California's Hydrogen Sector

- Why is global collaboration and partnerships more critical than ever in advancing California's hydrogen sector.
- Exploring key international hydrogen initiatives, such as clean hydrogen alliances and cooperation agreements, and their relevance to California
- What international collaborations and technology partnerships are taking place that have already have benefited California's hydrogen sector.
- Highlighting the importance of knowledge sharing and technology transfer in collaborations.
- Discussing the economic opportunities and potential growth for California's hydrogen sector through collaborations.

Attendee insights: This panel discussion would provide valuable insights into the role of international collaboration and partnerships in the California hydrogen sector, fostering dialogue among experts, industry leaders, policymakers, researchers, and advocates for a more connected and sustainable global hydrogen industry.

Robert Do, CEO, SGH2 Energy Global Corp.

Tony White, Director, Vertical Market, Hydrogen and Sustainable Fuels, Siemens

Hugo Wagner, Manager, Technology Partnerships, Airbus

Arnaud Namer, COO, Universal Hydrogen

Mike Hart, CEO, Sierra Energy

### 12:00

### **Lunch and Exhibition Visit**

1:30

### Powering the Future: Hydrogen as an Energy Storage Solution in California

- An overview of California's energy storage requirements, including the role of hydrogen in meeting these needs.
- Discuss how hydrogen storage can support grid balancing, peak demand management, and supply-demand matching in California's energy grid.
- Showcase ongoing or completed projects that use hydrogen as an energy storage solution in California.
- Examine the regulatory and policy landscape in California that affects the deployment of hydrogen storage systems.





• Discuss the economic feasibility of hydrogen storage projects, including costeffectiveness and potential revenue streams.

Attendee insights: This panel discussion would provide attendees with valuable insights into the potential of hydrogen storage to enhance California's energy infrastructure and support the integration of renewable energy sources, fostering dialogue among experts, policymakers, and industry leaders.

Moderator: Kirk Hamilton, Senior Engineering Advisor, CFER Technologies

Ivan Kawulka, Director of Sales, Ambartec H2

Natasha Kostenuk, CEO, Ayrton Energy

### 2:15

### Taking Hydrogen to the Next Phase through Considered and Thoughtful Investment

- Examining how to structure a bankable hydrogen project
- To what extent is blending public and private capital the way forward?
- Creating policy and regulatory frameworks that incentivize investment
- Examples of pioneering projects that have reached successful commercial scale project build

Attendee Insights: Gain knowledge into the current funding model for hydrogen projects and other factors will be key to the development of the hydrogen market.

Anthony McMaken, Director, Finance, HIF Global

Adam Wasserman, Managing Partner, Global Logistics Development Partners

Tyler Reitmeier, Business Development Leader-Industrial Gases & Green Hydrogen, Yokogawa

3:00

### **Networking and Coffee Break**

3:30

# Driving Sustainable Growth: Stakeholder Engagement in California's Hydrogen Revolution

- Highlight the importance of engaging local communities, addressing concerns, and ensuring equitable access to hydrogen technologies
- Offering clear and accessible information about the role of hydrogen in achieving climate goals, energy security, and economic development to garner support and build trust.
- Addressing the environmental benefits, challenges, and mitigation strategies associated with hydrogen projects in California.





Attendee insights: the panel aims to provide attendees with a comprehensive understanding of stakeholder engagement dynamics in California's hydrogen sector and inspire collaborative efforts towards a sustainable energy future.

Moderator: Bill Elrick, Executive Director, Hydrogen Fuel Cell Partnership

Jason Caudle, City Manager, City of Lancaster

Joy Langford, Chief Community Officer, Alliance for Renewable Clean Energy Hydrogen Energy Systems (ARCHES)

Meha Bola, Senior Advisor, GHD

4:15

**Close of Conference** 

