LIGHT-DUTY HYDROGEN AND FCEV EFFORTS

Veloz Fuel Cell Webinar

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Motivations

• Zero Emission Vehicles vital to addressing air quality & climate change

• Goal to enable industry to scale up a sustainable market

• MD/HDV and LDV Synergies
  • LDV: FC system economy of scale
  • MD/HDV: H2 fuel economy of scale
California’s Efforts

• Statutory Requirements
  • AB 8: Hydrogen station funding and analysis
    • $20M/year until January 1, 2024
    • At least 100 stations by January 1, 2024
  • SB 1505: 33% renewable H2

• Directives
  • EO B-16-12: 1.5M ZEVs by 2025
  • EO B-48-18: 200 H2 stations by 2025, 5M ZEVs by 2030, 250,000 chargers by 2025

• Programs
  • Station operations testing (accuracy, purity, fueling protocols)
  • Clean Vehicle Rebate Project
  • Low Carbon Fuel Standard credits
  • Network planning and analysis
  • Incentive programs for MD/HDV
  • Public-private collaboration
California’s Light-Duty FCEV Progress

2018 Year in Review

Network Summary
- Number of Stations: 39 Open + 25 Coming Soon
- Total Open Capacity: 7,890 kg/day
- Fuel for Approx. 1,800 FCEVs per day
- Enables Deployment of Approx. 10,400 FCEVs

FCEV Deployment Status
- Oct 2018 DMV Registrations: 5,014
- Dec 2018 Fuel Cell Partnership Sales: 5,658

Graph showing the increase in Auto Manufacturer Survey-Based FCEV Count from 2014 to 2024.

Map of California highlighting newly open, previously open, coming soon, and 150 mile coverage stations.
Paths Forward

1,000 H2 Station Proj. (2030)

Benefits by the Numbers

BY 2030

- 1,000 STATIONS
- + 1,000,000 CARS

- 693.5 million gallons per year of gasoline displaced
- 2.7 million metric tons per year GHG avoided
- 3,900 metric tons per year NOx avoided
- 97% of disadvantaged communities within the station network coverage

*while today’s recognizes only 22 percent renewable hydrogen

H₂@Scale!
Resources

www.arb.ca.gov/hydrogen

www.energy.ca.gov/transportation/report_ab8.html

www.cafcp.org

www.businessportal.ca.gov/zero-emission-vehicle-program/zev-resources/

www.business.ca.gov/ZEV-Action-Plan