

Clean Fuels Retreat January 2015

Hydrogen Station Upgrades

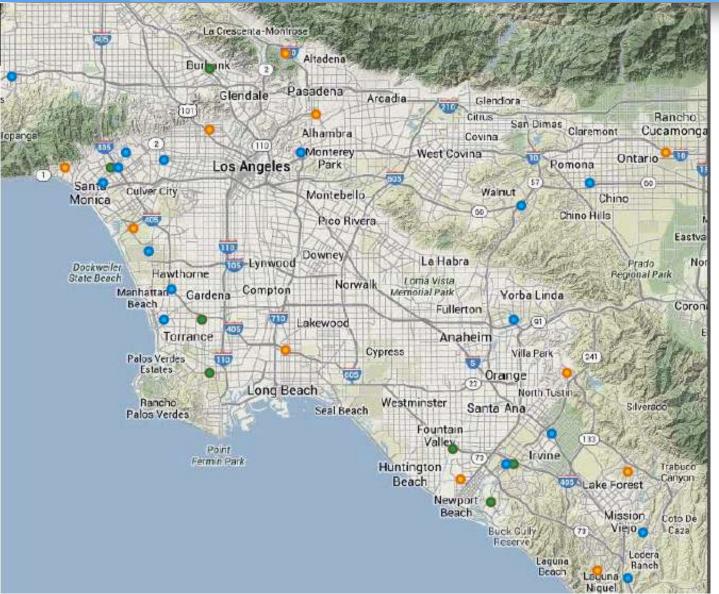
CEC awarded SCAQMD \$6.69M for H2 station

upgrades

- SCAQMD released RFP
- Four projects selected
 - ➤ Shell Equilon—Torrance
 - ➤ Air Liquide—LAX
 - ➤ Mebtahi—Harbor City
 - ➤ H2 Frontier—Burbank



New Hydrogen Stations



- Funding for 12 stations in South Coast Air Basin
- Four renewable stations (\$200k)
- Eight delivered stations (\$100k)

Upgrade Standards

- Stations implement standards from CEC PON-13-607
 - Mininum average capacity100 kg/day
 - ➤ 3 back to back fills/hour
 - CDFA/DMS certified dispenser
 - Hydrogen quality standard J2719:2011
 - Dispenser shall meet J2601:2010 fueling protocol
- Station upgrades will be completed 2015-2016



AQMD Hydrogen Station Status

- SCAQMD station received CDFA/DMS Temporary Use permit
- SCAQMD station in final stages of commissioning
- CDFA/DMS evaluation of dispensers ongoing









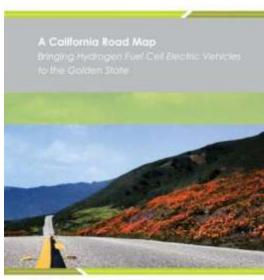
California Fuel Cell Partnership

CaFCP: 2014 Annual Membership & Support:

- Bevilacqua-Knight, Inc. \$138,000 total
- Roadmap Update (HyPPO)
 Hydrogen Progress, Priorities, and Opportunities
- From 2013 to 2016, CaFCP's goals relate to Preparing for Market Launch through coordinated individual and collective effort
 - Coordination
 - Collaboration
 - Communication

• **2015**:

- Increased MD/HD focus
- Station map/status, website, events







Hydrogen Mobile Fueler Proposal

- CEC co-funded almost \$1M
- Proposal to co-fund \$200k to H2 Frontier for hydrogen mobile fueler
- Partners include Gas Technology Institute,
 U.S. Hybrid
- Mobile fueler will be deployed as needed; support stations during upgrades, special events



OCSD Station Status



- Orange County Sanitation District APCI
 - ➤ DOE/CARB/SCAQMD original funding spent
 - Strategic to keep station open
 - > Heavily traveled area, right off main corridor
- Short term Orange County Sanitation District APCI
 - Keep station operating with delivered hydrogen
 - ➤ September 2014 SCAQMD approved \$75k, CARB co-funded
- Vision Orange County Sanitation District
 - Meets SB 1505 renewable requirement (100% anaerobic digester gas)
 - Transition to commercial



Questions?





