Creating Dedicated Renewable Hydrogen Supply

California Fuel Cell Partnership
Executive Board Meeting

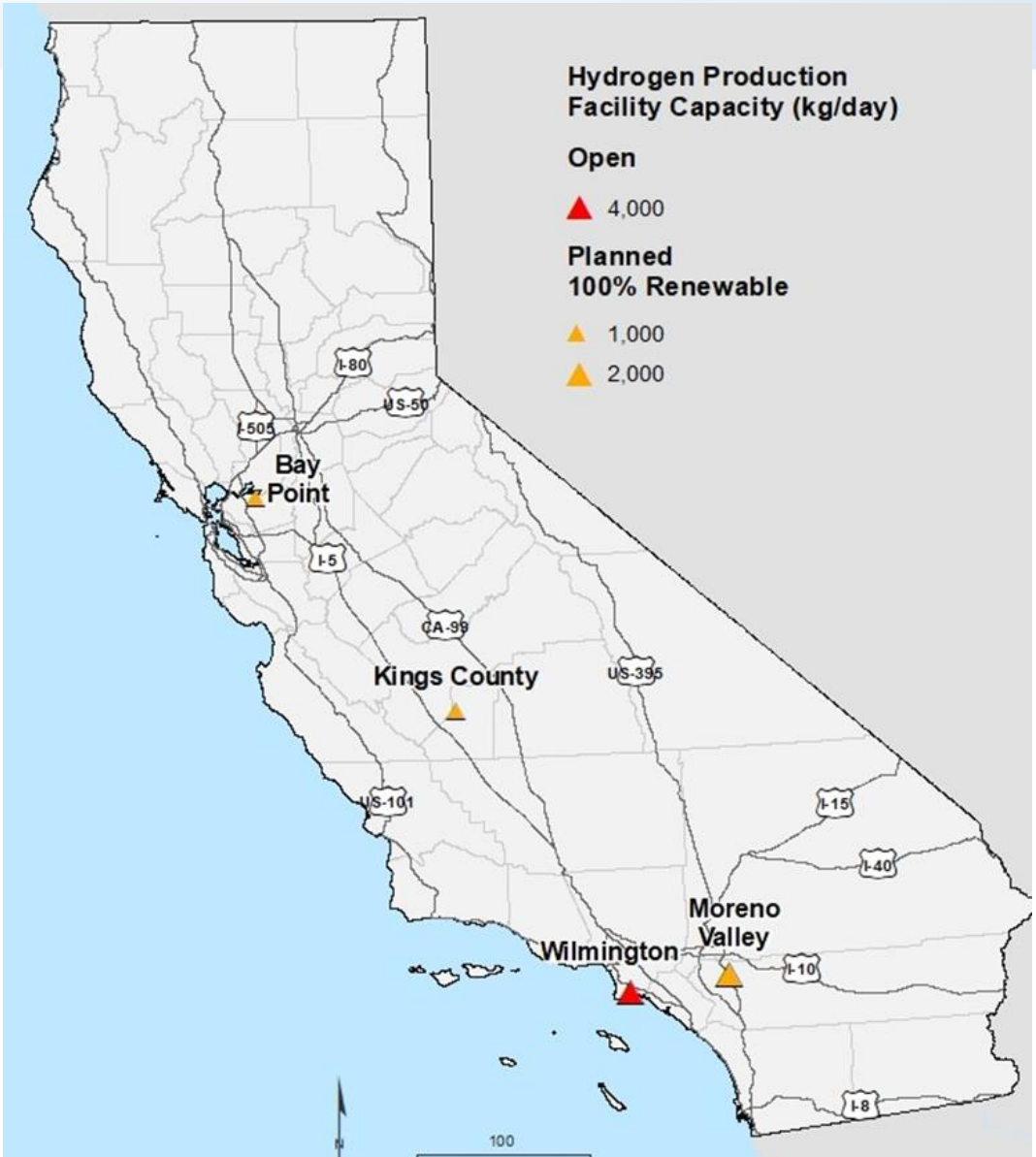
Phil Cazel
October 17, 2018
California Energy Commission

Energy Commission Support

GFO-17-602: Renewable Hydrogen Transportation Fuel Production Facilities and Systems

- 100 percent renewable hydrogen production of at least 1,000 kg/day capacity for public stations
- Solicitation released in December 2017
- One facility funded in June 2018
- Notice of Proposed Award (NOPA) for two more facilities in October 2018

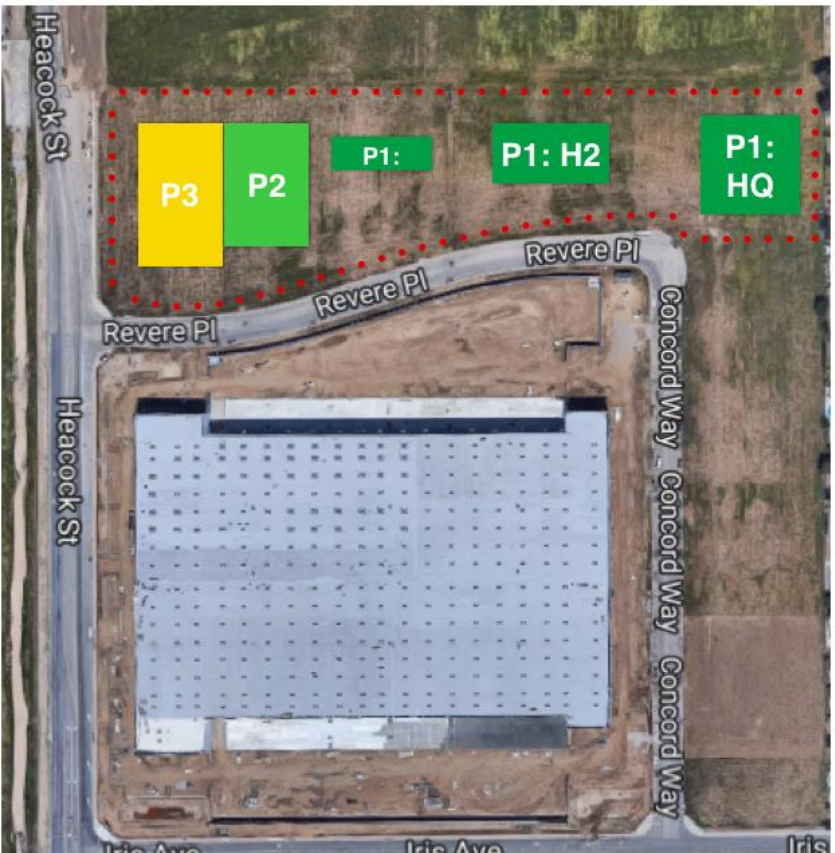
Hydrogen Production Facility Map

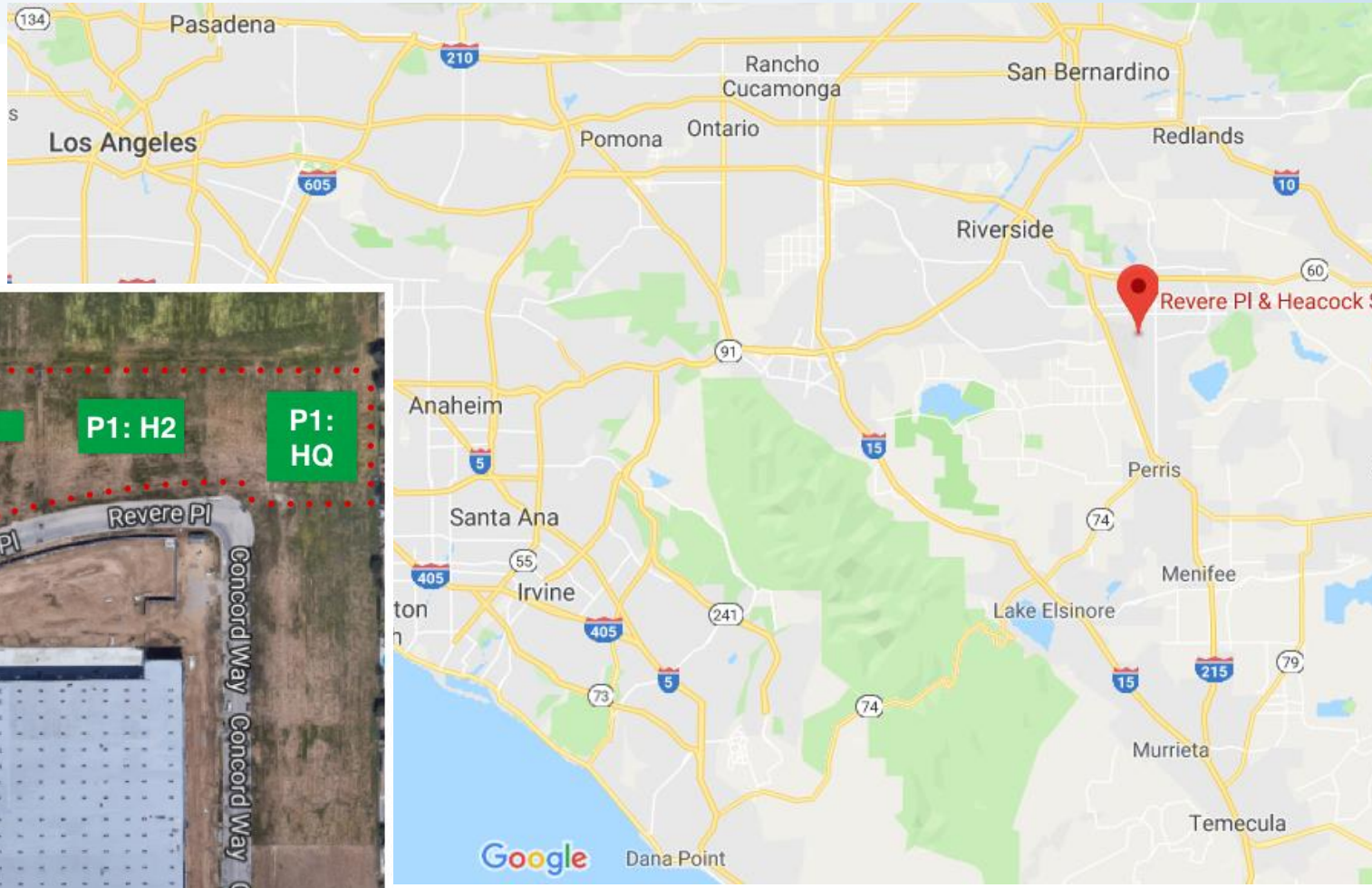


StratosFuel, Inc.

- Grant Award: $3,965,665
- Energy Commission approved in June 2018 with CEQA process complete
- Location: Moreno Valley, Riverside County
- Production Capacity: 2,000 kg/day in addition to 3,000 kg/day already planned
- Completion Date: Estimated Q4/2019
- Renewable Hydrogen: Electricity from wind farm PPA
- Electrolyzer equipment from Hydrogenics

StratosFuel – Moreno Valley Site

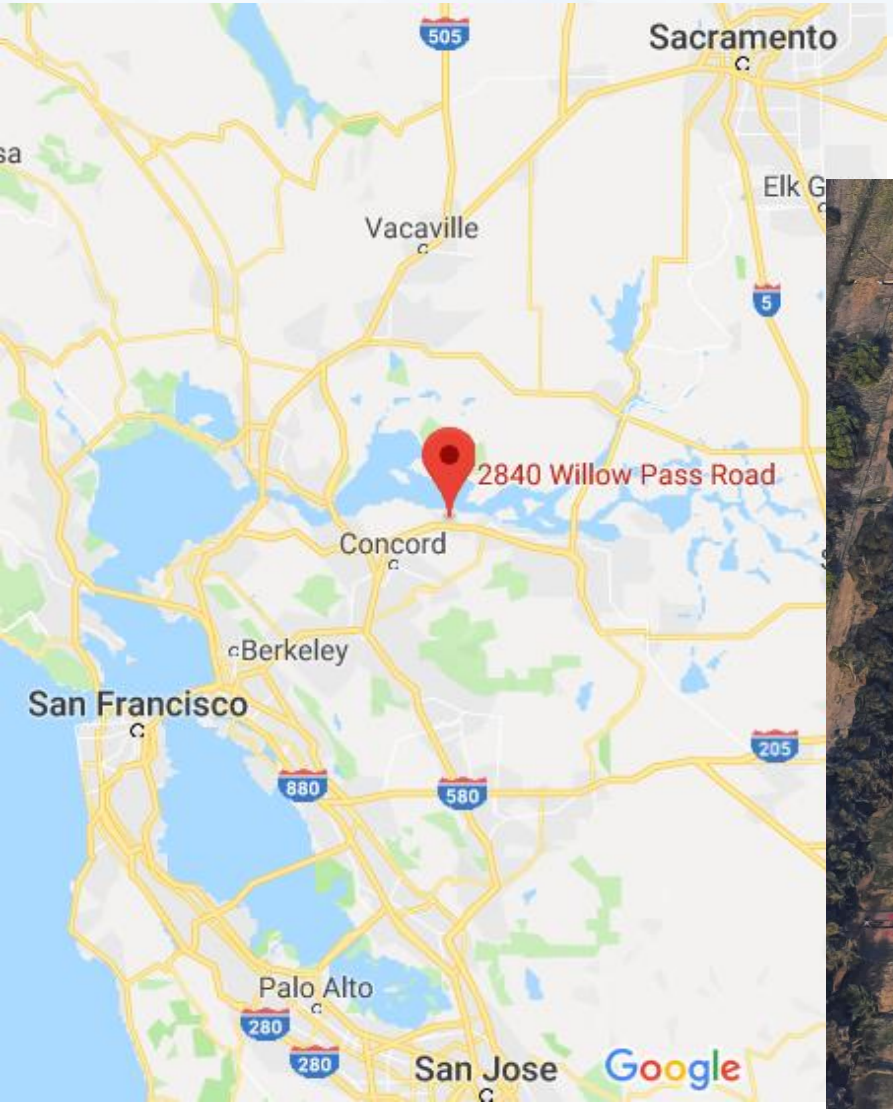




Shell-Equilon

- Grant Award: $3,965,665
- Energy Commission NOPA October 2018
- Location: Bay Point, Contra Costa County
- Production Capacity: 1,000 kg/day
- Completion Date: Estimated Q4/2020
- Renewable Hydrogen: On-site Solar Photovoltaic
- Partnering with other companies within the Shell Group for site (existing industrial plant) and solar development

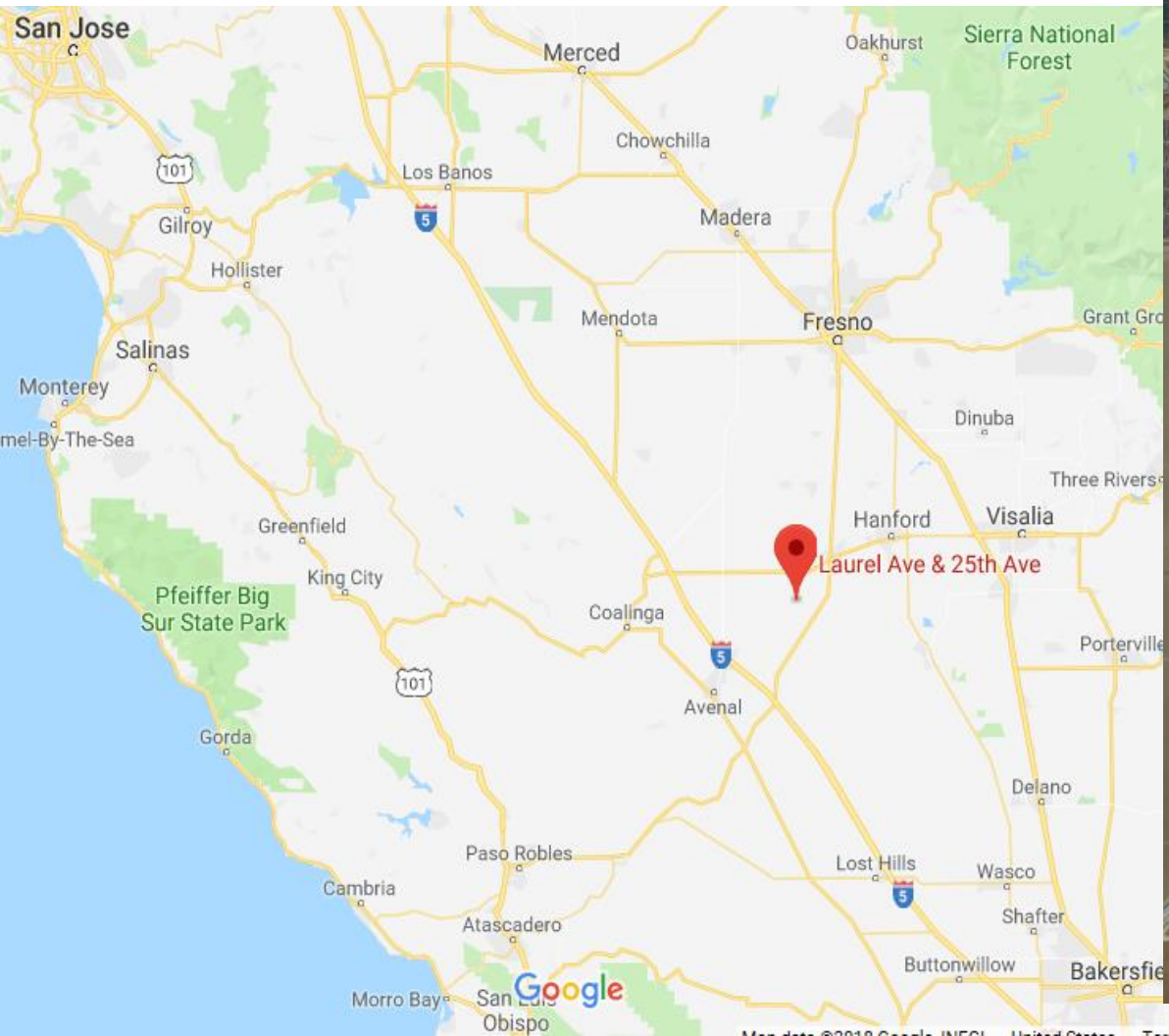
Shell – Bay Point Site



H2B2, USA LLC

- Grant Award: $3,965,000
- Energy Commission NOPA October 2018
- Location: Unincorporated Kings County
- Production Capacity: 1,000 kg/day
- Completion Date: Estimated Q4/2020
- Renewable Hydrogen: On-site Solar Photovoltaic
- Giner ELX is equipment partner

H2B2 – King's County Site



Funding

- Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)
  - $3,965,665 from Emerging Opportunities Fund
  - $7,930,665 from Alternative Fuel Production and Supply
- Does not reduce the $20 million annual allocation for hydrogen refueling infrastructure

Questions?

Thank you!