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# Scaling Infrastructure for the Growth of Zero-Emission Fleets and Renewable Fuel Production

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# Why SunLine is Centering its ZEB Fleet on Electric Fuel Cell

#### **High daily ranges**

**300 miles** routes and routes with frequent service



### Challenging terrain

FCEBs excel on hilly terrain and steep grades



#### Fast refueling at depot

FCEBs are compatible with fueling islands and restrictive schedules



#### **Extreme climates**

FCEBs excel in all weather, from cold winters to hot summers



#### **Full route flexibility**

FCEBs are a 1:1 replacement for ICE buses and are not tied to on-route infrastructure



#### **Vehicle Weight**

Significant reduction in vehicle weight

### **ZEB Fleet**



6







- 2 FC in Production
- 5 awarded through VW Mitigation Settlement and vehicle replacement funds
- 5 awarded through EPA TAG

El Dorado National

**Ballard** 

**US** Hybrid

BAE

New Flyer

Ballard

Hydrogenics

Siemens

## Hydrogen Fueling Station Overview





#### Proton/Nel PEM Electrolyzer

- 900 Kg per day production
- 60% renewable solar electricity
- 380 Kg use per day
- 2 dispenser fast fill rate
- \$8.7 Million CARB Grant
- Public Fueling 700
  Bar expansion for future





# Solar Microgrid to Hydrogen





SunLine is looking to expand its fueling systems with the creation of a micro-grid:

Phase 1 – Solar Farm

Phase 2 – Solar to Hydrogen for Electricity Storage

Phase 3 – 700 Bar Public Fueling Station

Phase 4 – Hydrogen / Electricity Truck Plaza

