

From the Hybrid Prius to the Fuel Cell Mirai

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May 2015

Cumulative Toyota Hybrid Sales



Toyota's Portfolio of Electric Drive

Battery EV



Plug-in Hybrid EV



Hydrogen Fuel Cell EV

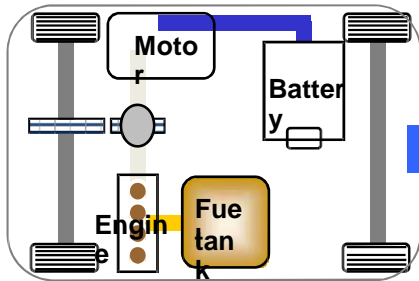


Technology

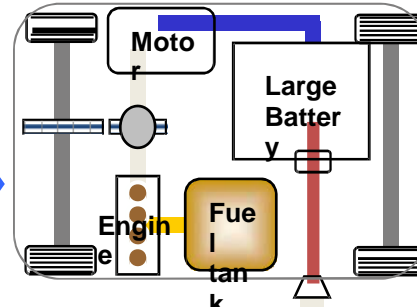
Evolution



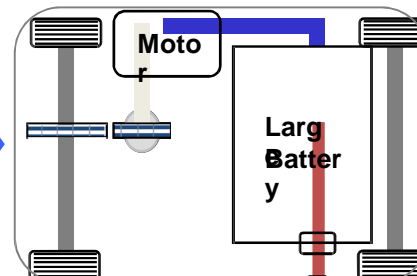
Evolution of Hybrid Technology



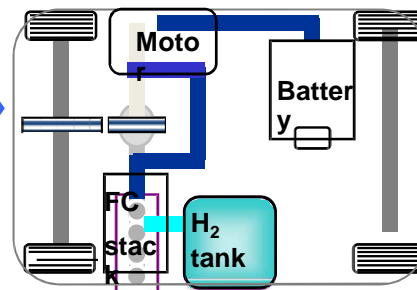
PHV



EV (Battery EV)



FCHV (Hydrogen FCEV)



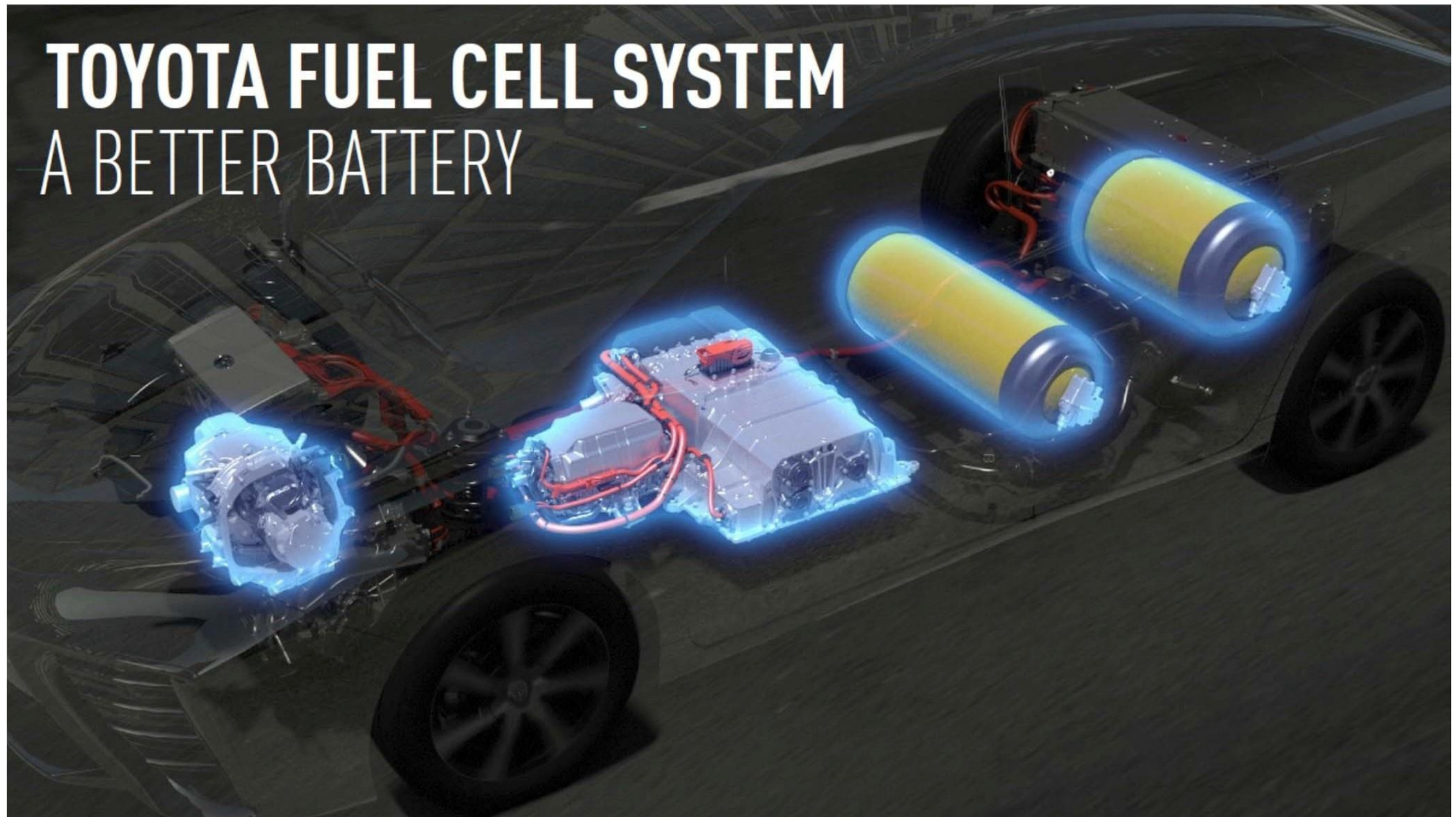
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Why Fuel Cell?

- Energy Security
 - Domestic non-petroleum fuel
- Sustainable
 - Renewable fuel
- Zero Emissions
- Gasoline Vehicle Like Attributes
 - Long range, quick refueling
- Fun to Drive

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Zero Emissions / Gasoline Convenience

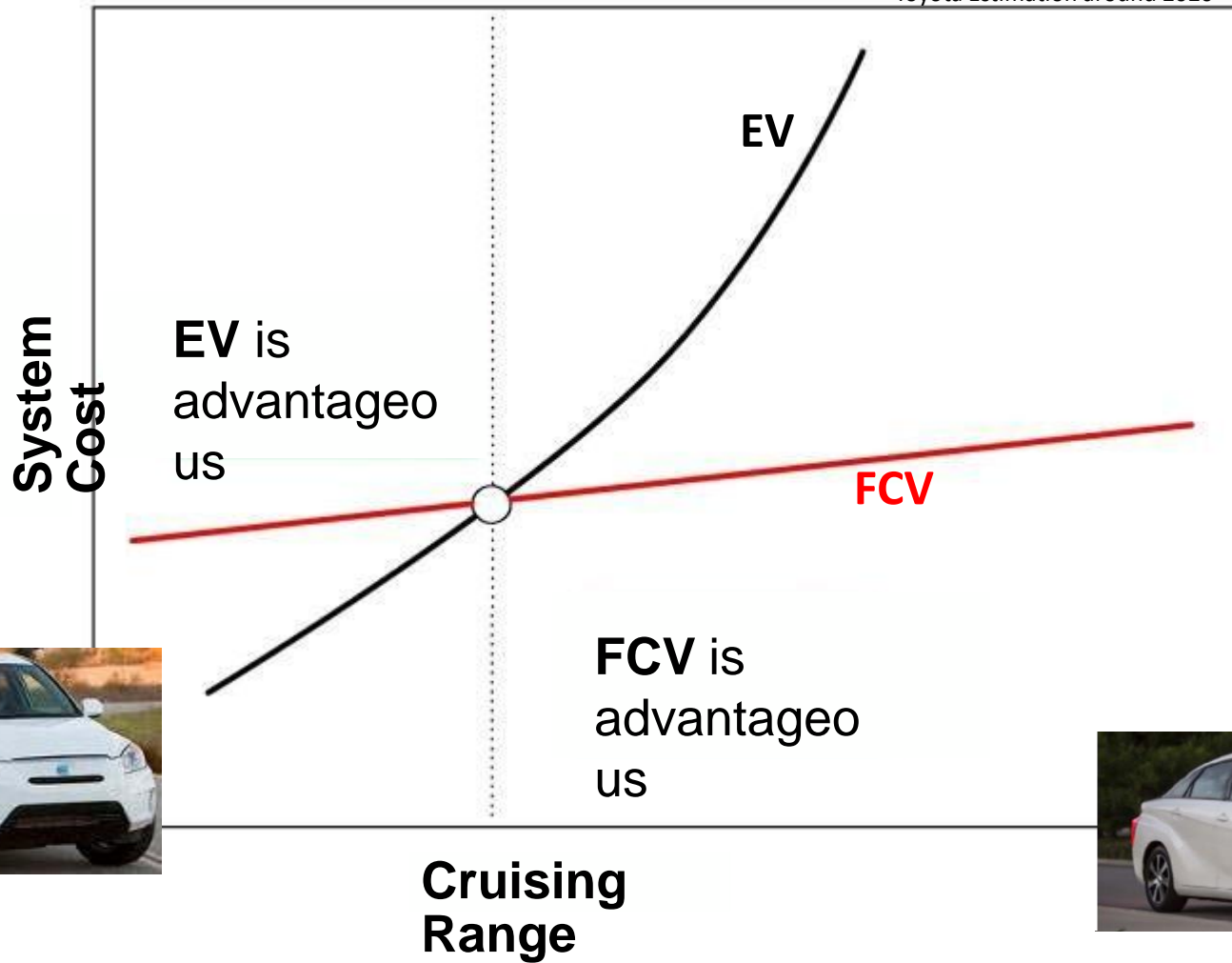


- 300 mile range
- 3-5 minutes to refuel

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ZEV Cost Comparison

Toyota Estimation around 2020



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2016 Mirai



- On sale in Japan today
- Coming to US this fall
- \$499/mo 36 month lease or \$57,500 – before incentives
 - Free fuel for 36 months
 - 8yr/100,000mi powertrain warranty
 - 24 hour roadside assistance
 - 24/7 concierge

Power Takeoff for Emergencies and Tailgating



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Multiple Applications



Toyota's 3 Part Commercialization Strategy

- 3000 Fuel Cell Vehicles in U.S. by 2017
- Support Infrastructure Expansion
- Royalty Free Patents

Vehicles



Global Deployment

3000 to US
by 2017



5700 globally
by 2017



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Infrastructure Partnerships



19 Stations
California
First Element



12 Stations
Northeast, US
Air Liquide

Californi Infrastructure a



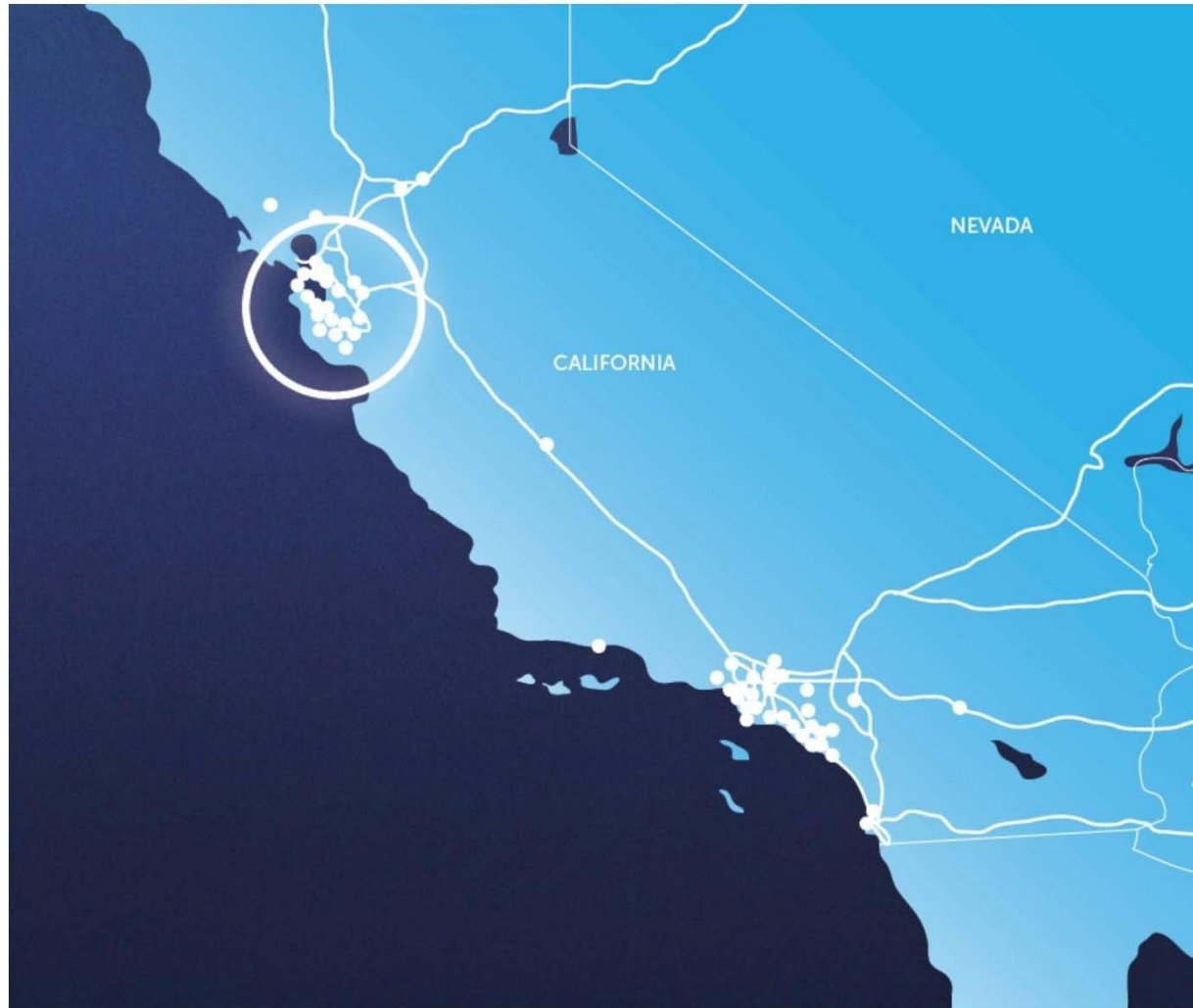
20
NEW STATIONS
BY 2015

40
NEW STATIONS
BY 2016

**\$200 MILLION
IN FUNDING**

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California Infrastructure Plan

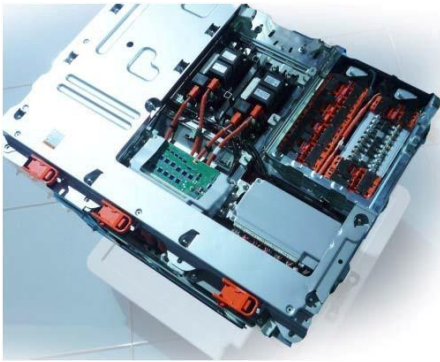


68 Hydrogen Stations by 2017

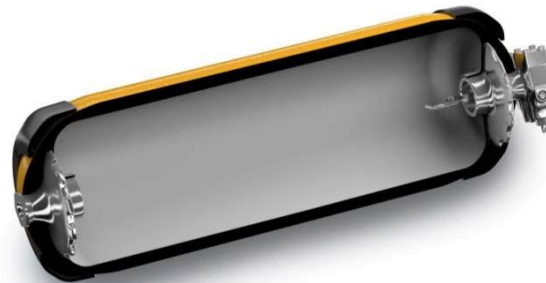
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Royalty Free Patents

+5600 available to other OEMs



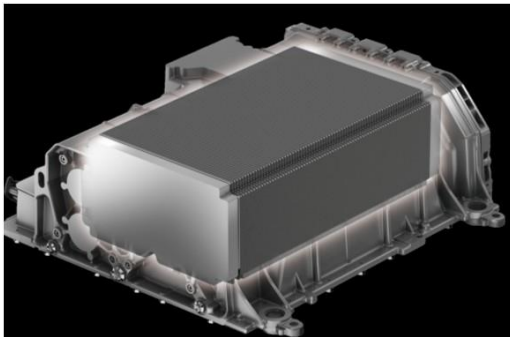
FC System Control



Carbon Fiber Tanks



Infrastructure



FC Stack



Tank Manufacturing 

Takeaways

- Toyota is committed to zero emission hydrogen fuel cell technology
- Mirai is part of a portfolio of efficient electric & conventional powertrains
- Government policies should level the playing field between zero emissions battery electric vehicle & zero emission fuel cell electric vehicles