

Scalable Hydrogen Fueling for Transit Applications

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Plug Power is the Leader in Hydrogen and Fuel Cell Technology

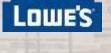


- Indoor fleets of 50-500+ fork trucks, 2-3 shifts
- 80% Blue Chip Customer Base
- 70% reduction in cost profile since 2013
- 180+ patents
- 30,000+ GenDrive fuel cells deployed
- 260M+ GenDrive operating hours
- 22 million+ GenFuel hydrogen fills into forklift fuel cells
- 16.5 million kg+ of hydrogen dispensed
- 88+ GenFuel hydrogen stations built at customer facilities

Holds 90%+ of the Hydrogen Fuel Cell Market for <u>Material Handling Equipment</u>

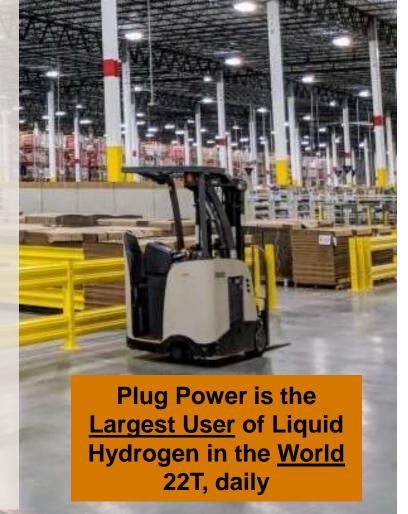






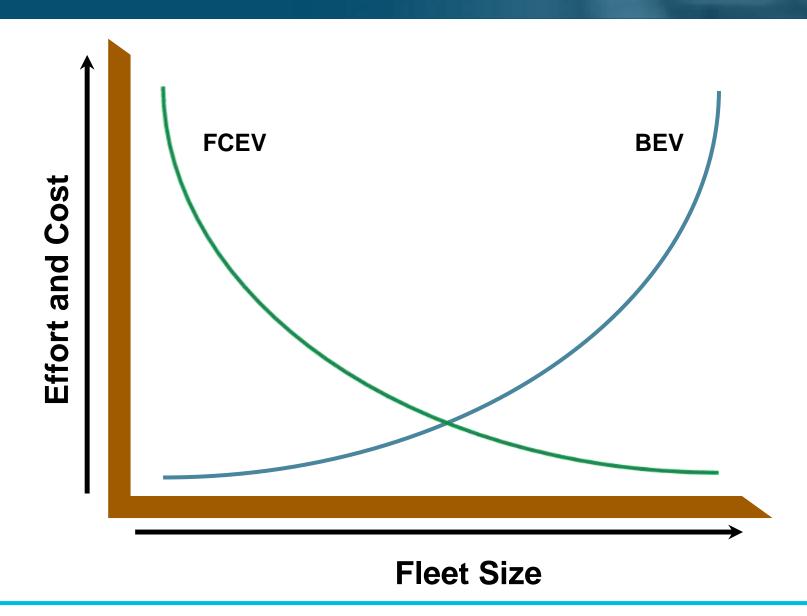






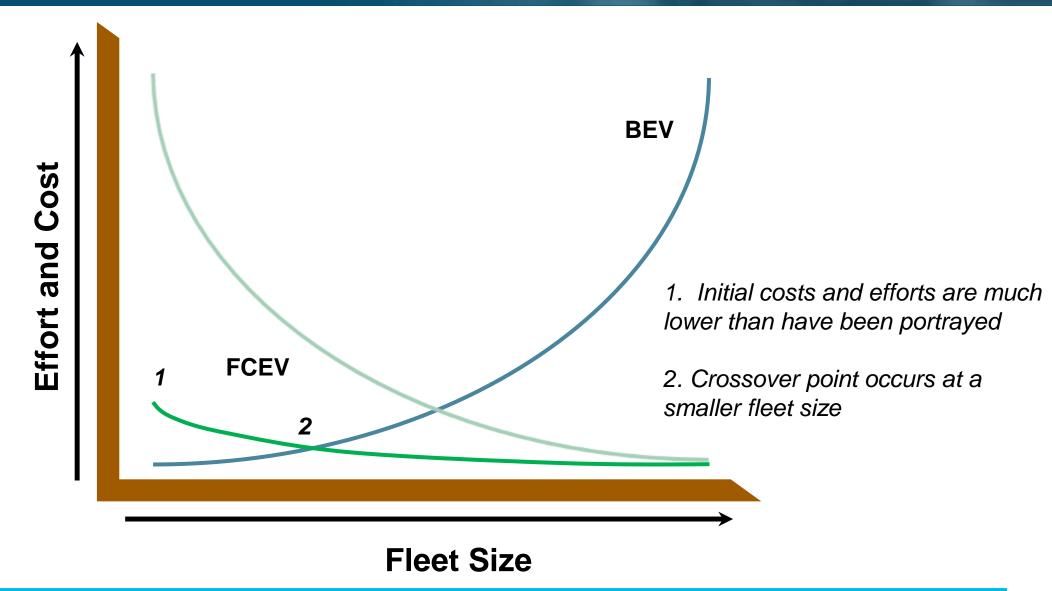
Conventional Wisdom of Electrical Infrastructure





Reality of Hydrogen Infrastructure





Hydrogen Solutions

PLUG P POWER

- All forms of Hydrogen can be renewable, and/or carbon free, and/or sustainable
- Hydrogen can be delivered
 - Liquid form [LH₂] by truck
 - Gaseous form [GH₂] by truck or pipeline
- Hydrogen can be generated on-site
 - Steam Methane Reformer
 - Electrolyzer (requires electricity infrastructure)











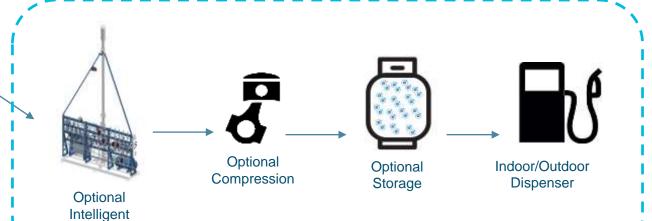
Electrolyzer LH2
Delivery Reformer

Delivered Gas – A Starter Solution









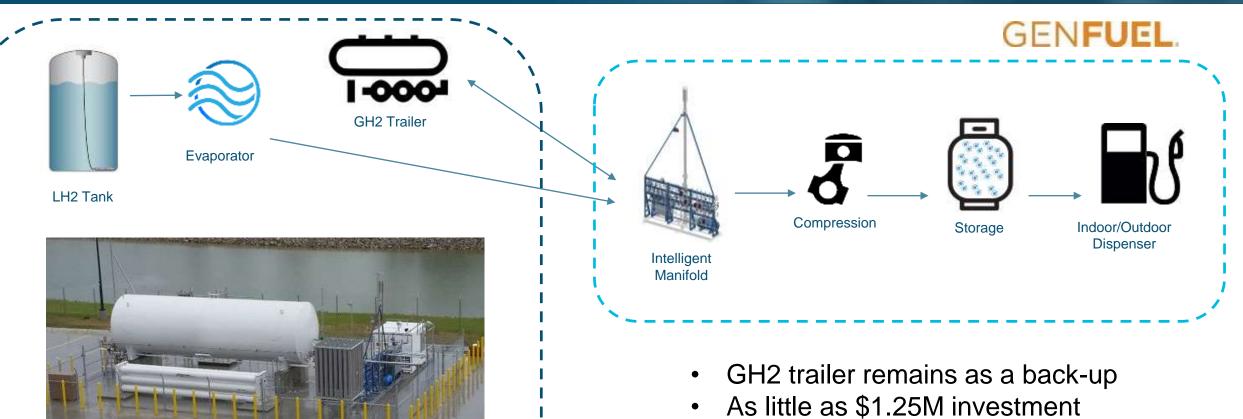
- As little as \$500K investment
- Higher per kG costs
- 1 to 4 buses

Manifold

All components can be re-used to expand system capacity

Delivered Liquid Solution – Fleet Expansion



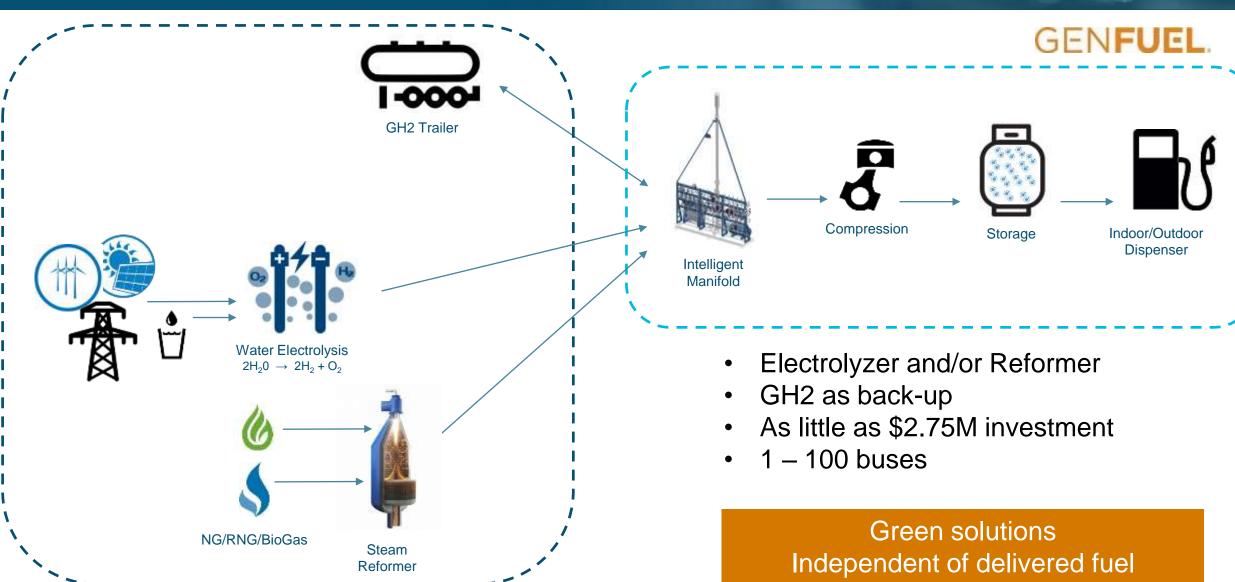


Low Capital and per kG costs are realized with Liquid H2 Solution

5 to 100 buses

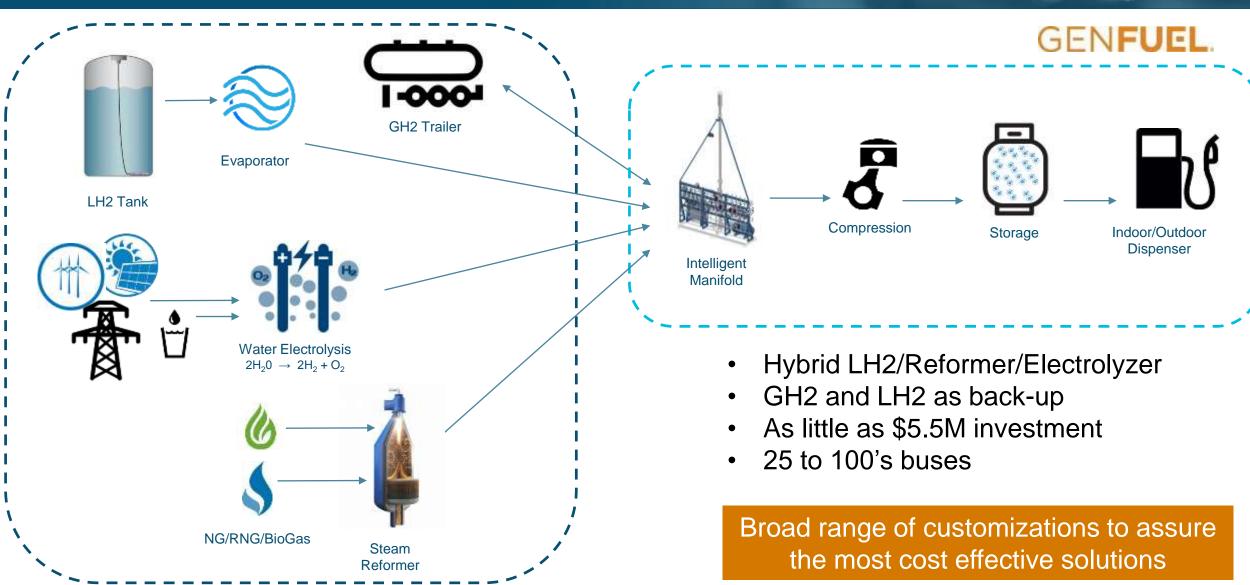
On-Site Generation Solutions – Fleet Expansion





Hybrid Solutions – Flexible and Forgiving





Hydrogen Infrastructure Planning Considerations



- Fleet conversion and expansion plans (broad range of 'accurate' planning numbers)
 - Approximately how many fuel cell vehicles to start at how many locations
 - Current and future locations
 - Ultimate fleet size (<u>range</u>) per location
 - Timing
- Access to water, electricity, and gas
 - Rates
 - Renewability
 - Stability of supply (supply contracts with <u>diversity</u> of sources)
- LCFS and Renewable energy credits
- Contractor selection
 - H2 experience
 - Turn-key
 - <u>Service</u> Level Agreements (performance <u>guarantees</u> with penalties)
- Hydrogen infrastructure expansion can <u>adapt</u> as your plans change (or <u>recover</u> from errors)



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