

Commercially Viable Fuel Cell Solutions: a 5-year outlook


Andy Marsh, CEO of Plug Power

November 6, 2019

Cautionary Note on Forward Looking Statements

This communication contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 that involve significant risks and uncertainties about Plug Power, including but not limited to statements about Plug Power’s expectations regarding full-year 2019 results, its five-year growth plan, future growth in revenue, gross billings, gross margin, operating income, adjusted EBITDA, annual system shipments, hydrogen fuel sales and fueling stations, market size for products, total GenDrive deployments, customer base and systems for delivery vans, expansion into new markets, expansion with existing customers, reductions in material costs and operating expenses, increased fuel cell stack life, reductions in stack cost, size and weight, and increased utilization of manufacturing capacity. You are cautioned that such statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times that, or by which, such performance or results will have been achieved. Such statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in these statements. In particular, the risks and uncertainties include, among other things, the risk that we continue to incur losses and might never achieve or maintain profitability; the risk that we will need to raise additional capital to fund our operations and such capital may not be available to us; the risk that our lack of extensive experience in manufacturing and marketing products may impact our ability to manufacture and market products on a profitable and large-scale commercial basis; the risk that unit orders will not ship, be installed and/or converted to revenue, in whole or in part; the risk that pending orders may not convert to purchase orders, in whole or in part; the risk that a loss of one or more of our major customers could result in a material adverse effect on our financial condition; the risk that a sale of a significant number of shares of stock could depress the market price of our common stock; the risk that negative publicity related to our business or stock could result in a negative impact on our stock value and profitability; the risk of potential losses related to any product liability claims or contract disputes; the risk of loss related to an inability to maintain an effective system of internal controls or key personnel; the risks related to use of flammable fuels in our products; the cost and timing of developing, marketing and selling our products and our ability to raise the necessary capital to fund such costs; the ability to achieve the forecasted gross margin on the sale of our products; the risk that our actual net cash used for operating expenses may exceed the projected net cash for operating expenses; the cost and availability of fuel and fueling infrastructures for our products; market acceptance of our products, including GenDrive, GenSure and GenKey systems; the volatility of our stock price; our ability to establish and maintain relationships with third parties with respect to product development, manufacturing, distribution and servicing and the supply of key product components; the cost and availability of components and parts for our products; our ability to develop commercially viable products; our ability to reduce product and manufacturing costs; our ability to successfully expand our product lines; our ability to successfully expand internationally; our ability to improve system reliability for our GenDrive, GenSure and GenKey systems; competitive factors, such as price competition and competition from other traditional and alternative energy companies; our ability to protect our intellectual property; the cost of complying with current and future federal, state and international governmental regulations; risks associated with potential future acquisitions; and other risks and uncertainties referenced in our public filings with the Securities and Exchange Commission (the “SEC”). For additional disclosure regarding these and other risks faced by Plug Power, see disclosures contained in our public filings with the SEC including, the “Risk Factors” section of our Annual Report on Form 10-K for the year ended December 31, 2018. You should consider these factors in evaluating the forward-looking statements included in this presentation and not place undue reliance on such statements. The forward-looking statements are made as of the date hereof, and Plug Power undertakes no obligation to update such statements as a result of new information.

This presentation includes adjusted EBITDA. This non-GAAP measure provided herein is adjusted for certain items as presented in the Appendix of the 8k filed with this presentation containing the non-GAAP reconciliation. Forecasted adjusted EBITDA for 2024 is defined as operating income, as forecasted, plus stock-based compensation, plus depreciation and amortization. This non-GAAP measure is an indicator management uses as a basis for evaluating the Company’s performance and its ability to service debt and other finance obligations, as well as for forecasting future periods. Management also establishes performance targets, annual budgets and makes operating decisions based in part upon adjusted EBITDA. Disclosure of this non-GAAP measure provides investors with the same information that management uses for these purposes. In addition, investors have historically requested and the Company has historically reported this non-GAAP financial measure as a means of providing consistent and comparable information with past reports of financial results. Adjusted EBITDA is not a measure of our performance under GAAP and should not be considered in isolation or as an alternative to operating income or any other measures prepared in accordance with GAAP. While management believes that adjusted EBITDA provides useful supplemental information to investors, there are limitations associated with the use of this measure. Adjusted EBITDA is not prepared in accordance with GAAP and may not be directly comparable to a similarly titled measure of other companies due to potential differences in the exact method of calculation. Adjusted EBITDA should be read only in conjunction with the Company’s consolidated financial statements prepared in accordance with GAAP.

A photograph of a large industrial warehouse filled with stacks of pallets wrapped in clear plastic. A semi-transparent white rectangular box is overlaid on the left side of the image, containing text. The background shows rows of pallets stretching into the distance under bright industrial lighting.

We are the **leading technology company** developing hydrogen fuel cell engines and stations for the **broader transportation market**

A photograph of a man in a dark suit, white shirt, and blue tie, smiling at the camera. He is standing in a warehouse, with stacks of pallets wrapped in clear plastic behind him. The background shows the interior of a large industrial facility with high ceilings and various equipment.

Unmatched Accomplishments

30,000 Units Deployed

Operated over 270M hours

- Over 1B Miles

Leader in Powering Electric Vehicles

Constructed 80+
Hydrogen Stations

23M+ fuelings

Use 22T of Liquid H₂/day
**More than NASA*



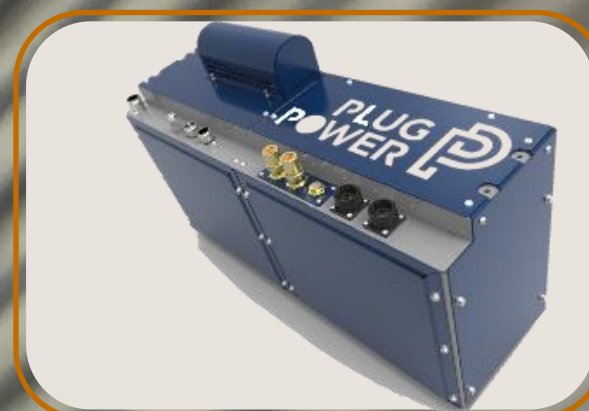
Leader in Hydrogen Infrastructure



MEA: Largest US Manufacturer



Stacks: Industry Leading Technology



ProGen: Complete Fuel Cell Engine



Skid: Modular Hydrogen System

Rich Technology Set

Prestigious Customer List



Material Handling

Targeting -
\$750M

Potential
TAM - \$30B

Electric Vehicles

Targeting -
\$200M

Potential
TAM - \$200B

Stationary

Targeting -
\$50M

Potential
TAM - \$15B

2024 – Targeting \$1B in Revenue

GENKEY®

GENDRIVE®



GENFUEL®



GENCARE®



Provider of Turn-Key Solutions

Pillars For Growth

**\$750M
In
2024**



Channels Globally



European Expansion



New Multisite Deals
New Customers



Continued Expansion

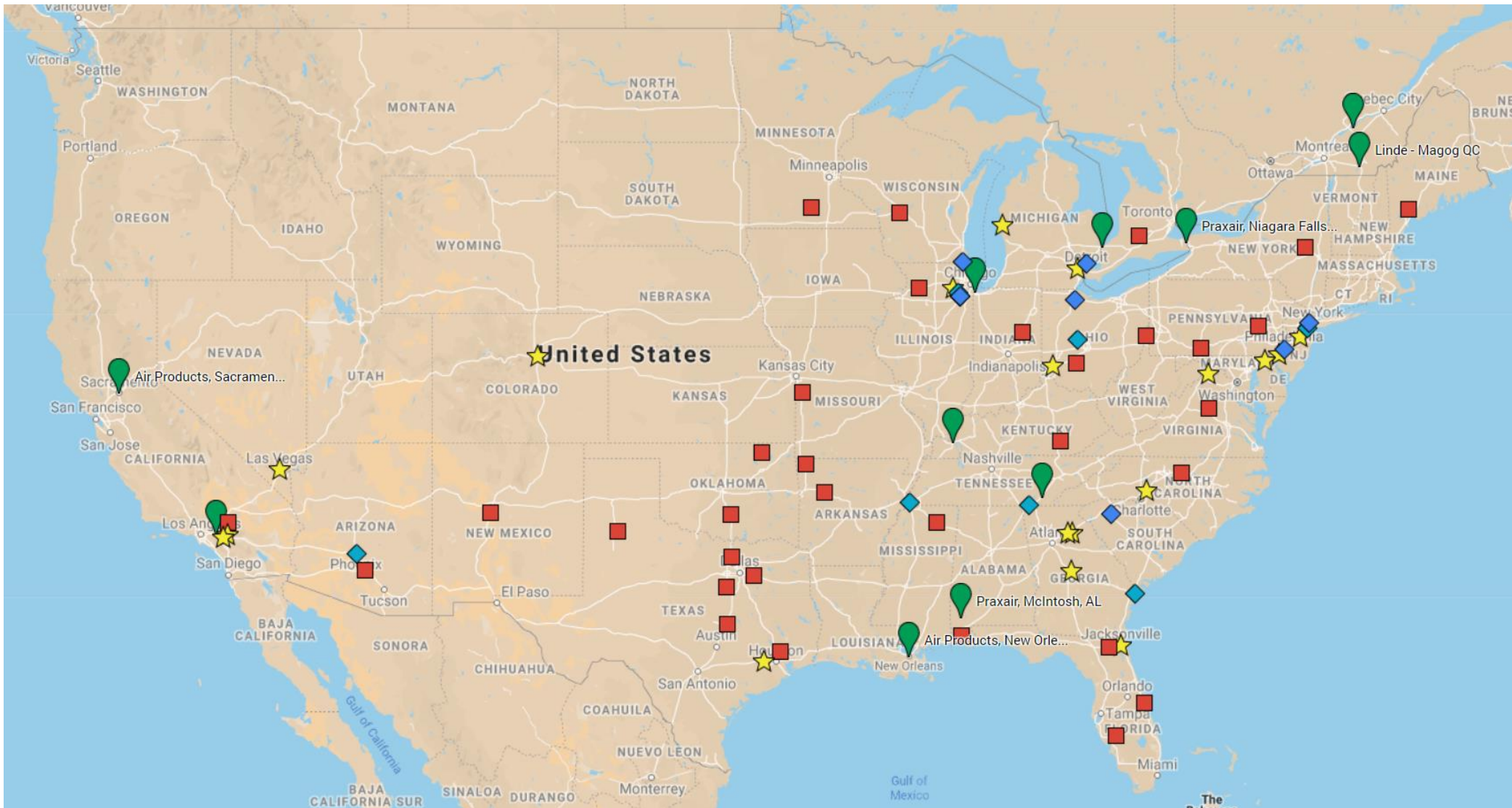


Plug's Growth in Hydrogen: 2024

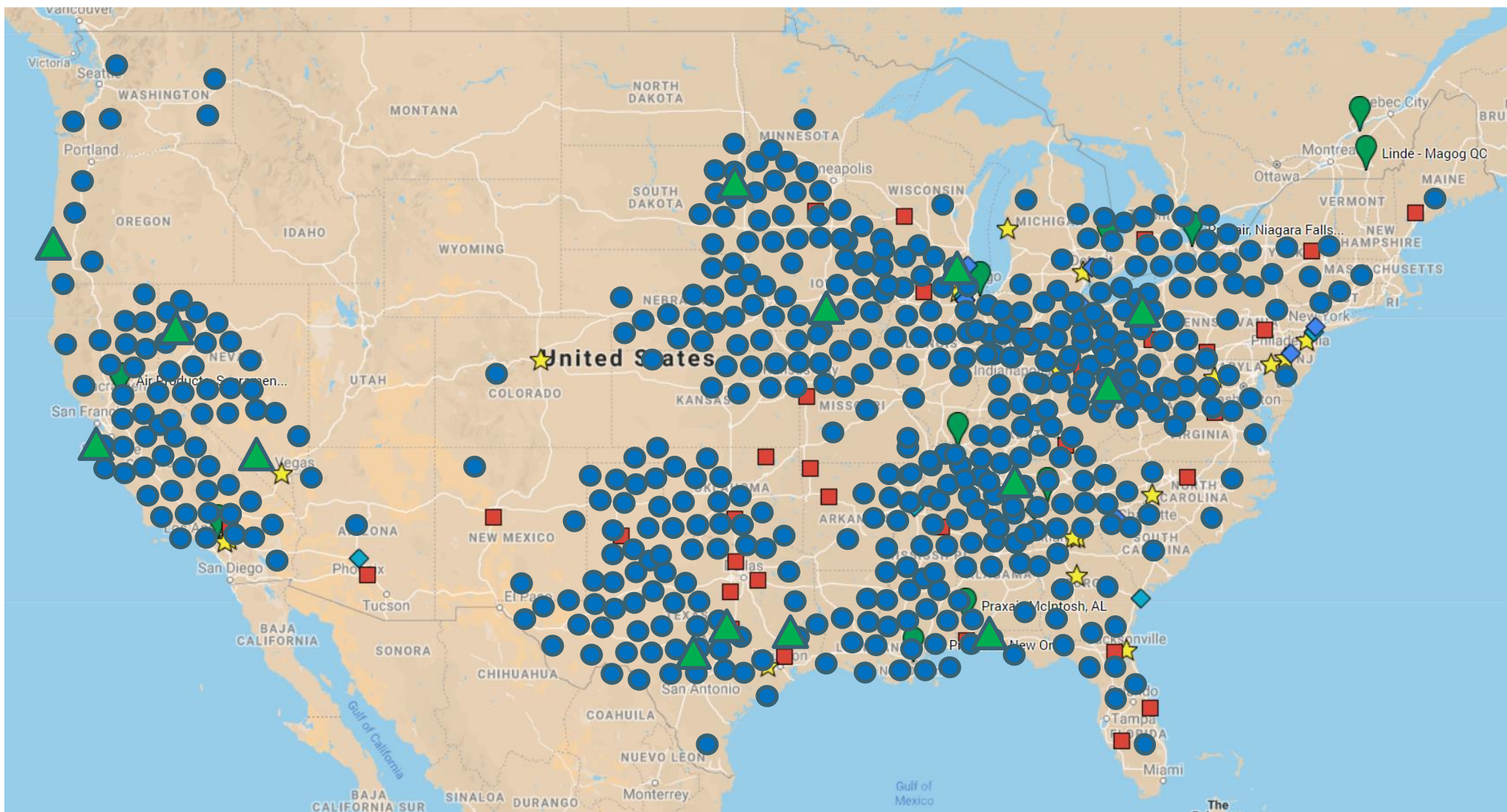
- 500+ fueling stations in operation
- 85+ tons of hydrogen used daily
- 100M+ kgs dispensed (cumulative)
- 175M+ fills on GenFuel systems (cumulative)

Plug's demand for hydrogen will grow by 40% annually

Current H2 footprint and projected growth



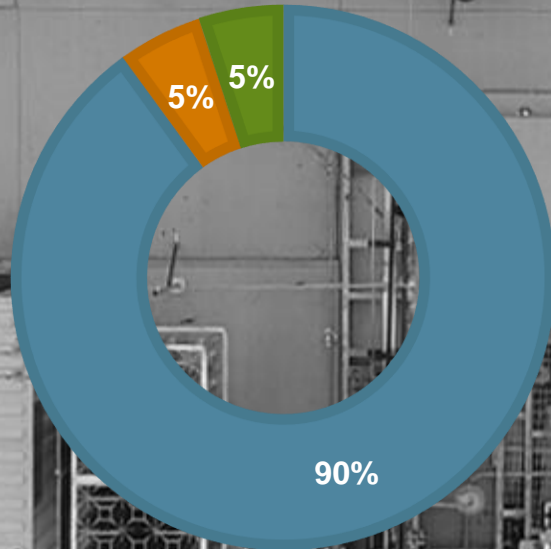
Current H2 footprint and projected growth



Hydrogen Sourcing Roadmap Options

2019-2020

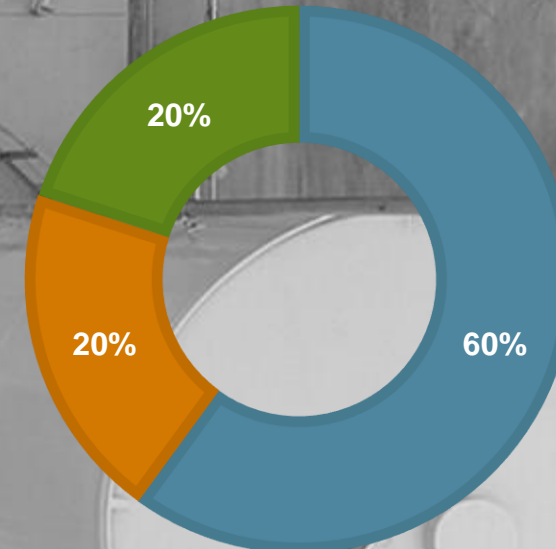
■ Liquid Delivery ■ Onsite Generation ■ Gaseous Delivery



- Develop strategic partnerships
 - Centralized generation
 - On-site generation (both electrolyzer and reformer technologies)
- Major R&D focus on small scale on-site generation
- Focus on city/regional gas delivery (ex. high density areas <100 mile radius) sourced from existing GenFuel sites

2021-2024

■ Liquid Delivery ■ Onsite Generation ■ Gaseous Delivery



- Build additional central LHY plants (up to 90 TPD)
- Build additional central GHY plants (up to 20 TPD)
- Integrate on-site generation into customer fueling stations
- Partnerships on reformer/electrolyzer manufacturing capabilities
- **50% of customer fuel is green hydrogen** - Development of solutions that integrate renewables into generation

Value Proposition

- Smaller Footprint
- Higher Power Density
- Low TCO for 4G and 5G Base Stations
- Noise Reduction

Sold via Direct Sales and International Partners

Demonstrated with the Southern Company – 500 sites deployed

Attributes of Fuel Cells

1. Energy Density is 10x BEVs

2. Asset Utilization

3. Sharing Economy

4. Fast Fueling

5. Range

6. Infrastructure

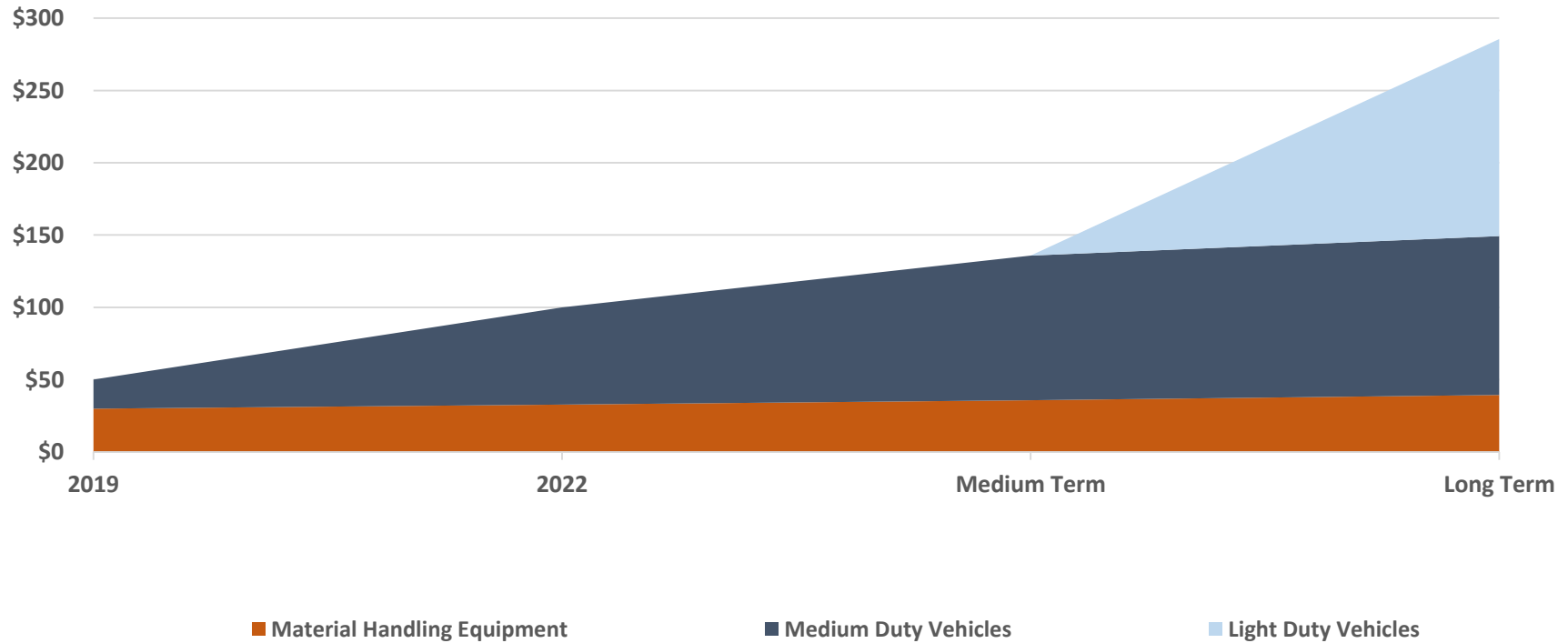
Applications



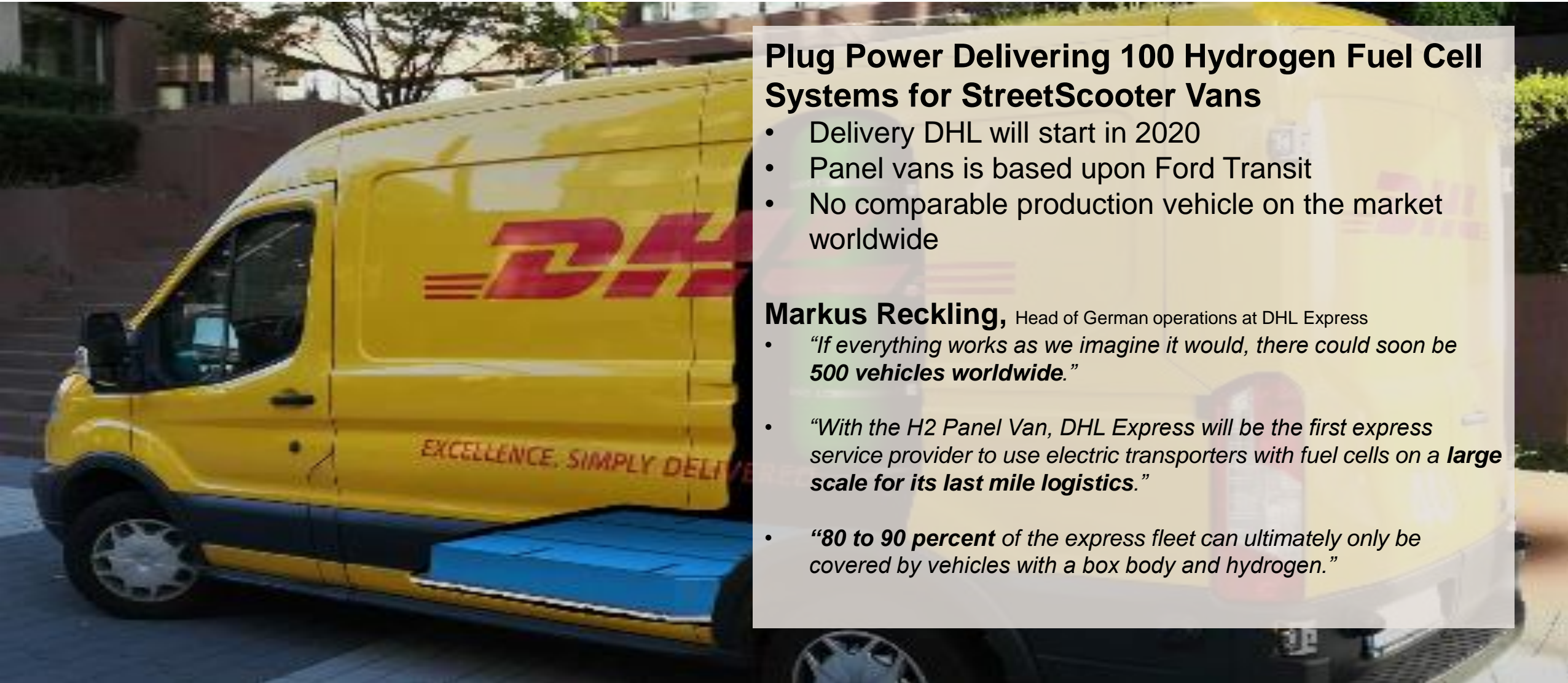
Strong Value Proposition

Market Opportunities

Market Value (Billions)



~\$300B Market Opportunity



Plug Power Delivering 100 Hydrogen Fuel Cell Systems for StreetScooter Vans

- Delivery DHL will start in 2020
- Panel vans is based upon Ford Transit
- No comparable production vehicle on the market worldwide

Markus Reckling, Head of German operations at DHL Express

- *“If everything works as we imagine it would, there could soon be 500 vehicles worldwide.”*
- *“With the H2 Panel Van, DHL Express will be the first express service provider to use electric transporters with fuel cells on a **large scale for its last mile logistics.**”*
- *“80 to 90 percent of the express fleet can ultimately only be covered by vehicles with a box body and hydrogen.”*

Other Electric Vehicle Applications



Goal – Leader in Powering Electric Motors

- ProGen-powered MULAG electric cargo tugger
- Currently in operation at the Hamburg, Germany airport
- Zero-emission solution for airport GSE vehicles
- Vehicles reduce operational costs while increasing productivity

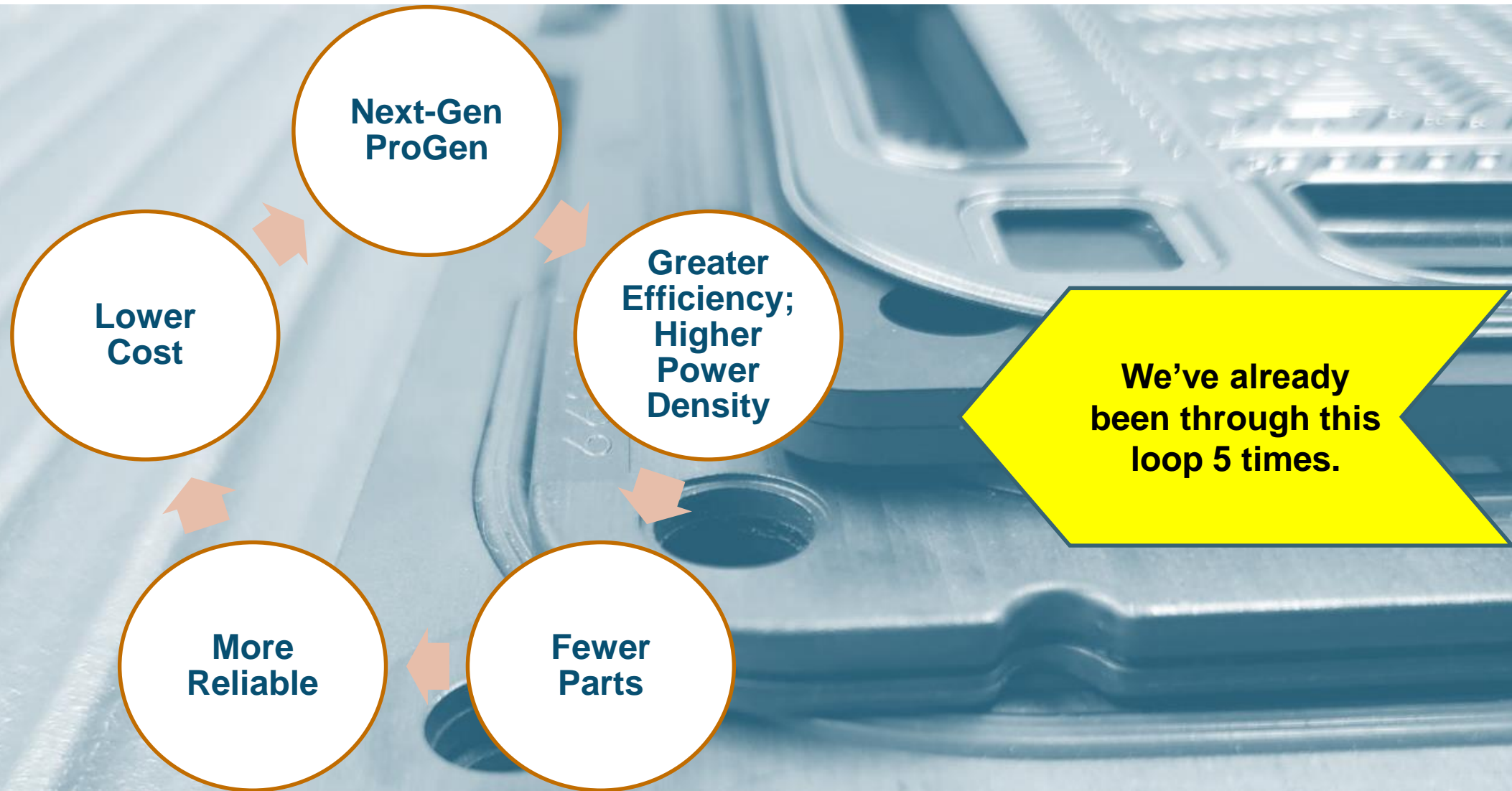


60 units and H2 station to be deployed at Hamburg Airport.

Leverage Modular Products: Targeting Multiple Markets



Continual Evolution of ProGen



Revenue: \$1B
Operating Income: \$170M
Adjusted EBITDA: \$200M



Now we will show you how we will execute this vision



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plugpower.com