



# Q4 & Full Year 2019 Results Conference Call

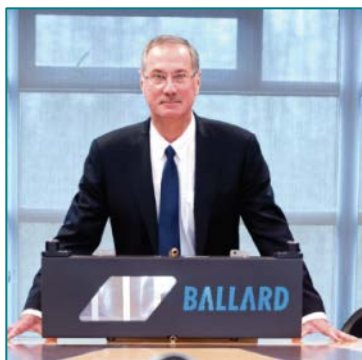
March 5, 2020

*Nasdaq & TSX Ticker: BLDP*

## Conference Call Participants



**Randy MacEwen**  
President & CEO



**Tony Guglielmin**  
CFO



# Forward-Looking Statements

*This presentation contains forward-looking statements, including: estimated revenue; gross margin; cash operating costs; adjusted EBITDA; product cost reductions; liquidity; market size and growth projections; customer value propositions; and expected sales and product shipments. These forward-looking statements reflect Ballard's current expectations as contemplated under section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Any such forward-looking statements are based on Ballard's assumptions relating to our financial forecasts and expectations regarding our product development efforts, manufacturing capacity, and market demand.*

*These forward-looking statements involve risks and uncertainties that may cause our actual results to be materially different, including, general economic and regulatory changes, detrimental reliance on third parties, successfully achieving our business plans and achieving and sustaining profitability. For a detailed discussion of these and other risk factors that could affect Ballard's future performance, please refer to our most recent Annual Information Form. Readers should not place undue reliance on Ballard's forward-looking statements and Ballard assumes no obligation to update or release any revisions to these forward looking statements, other than as required under applicable legislation.*

*All amounts are consolidated to include Ballard Power Systems Europe A/S and Ballard Unmanned Systems Inc. results and are in U.S. dollars, unless otherwise noted.*



## Overview

- Record quarterly revenue of \$41.9M in Q4 2019
- Full year 2019:
  - \$106.3M revenue exceeded outlook
  - 21% gross margin
  - (\$28.2)M Adjusted EBITDA
  - \$147.8M end-2019 cash reserves
  - \$110.3M end-2019 12-month order book
- Full-year 2020 outlook for top-line growth in revenue to approximately \$130M
  - At this time not expecting a material impact of COVID-19 on 2020 financial results

## 1 New Government Policy Initiatives

- 66 countries announced net-zero emission targets by 2050
- 18 governments – representing 70% of global GDP – now have hydrogen roadmaps
- Energy Ministerial “10-10-10” target set
- EU target of 30% reduction in class 8 truck emissions by 2030; apply to buses in 2022
- CARB goal: 100% clean energy bus purchases in California by 2029; 100% clean energy bus fleets by 2040



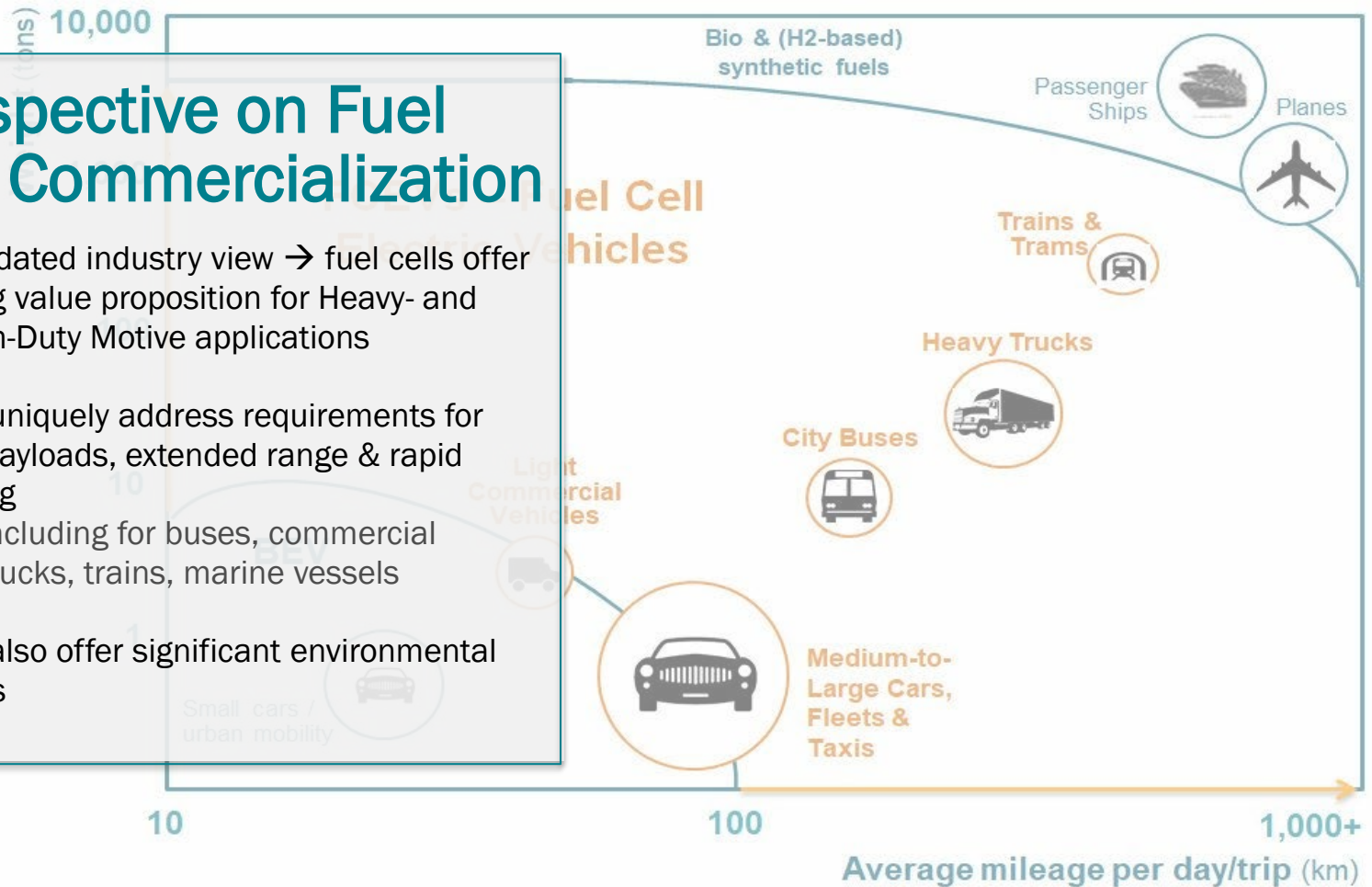
## 2 Investments in the Fuel Cell Sector

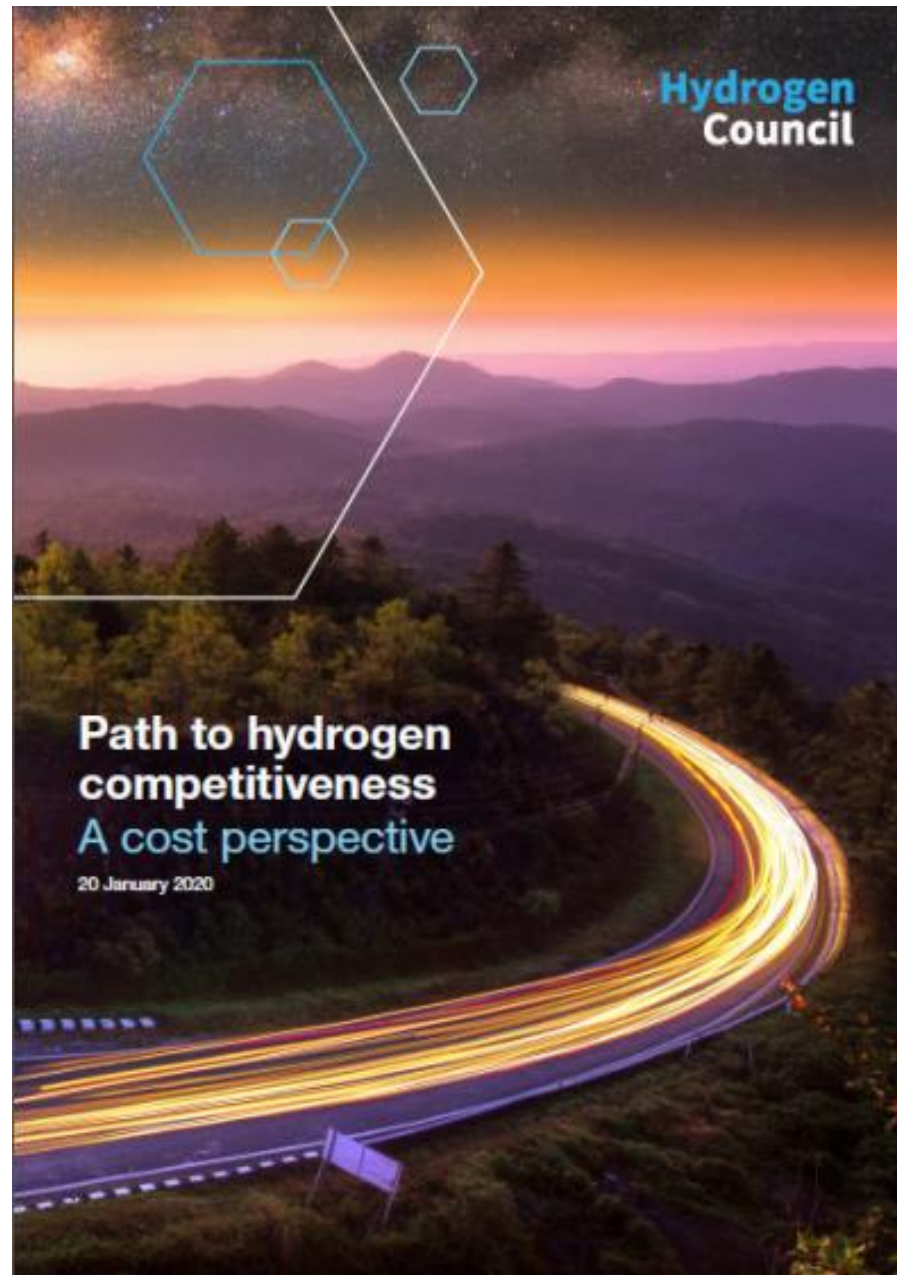
- Weichai Power investment & JV with Ballard
- Bosch licensing deal with PowerCell
- Cummins acquisition of Hydrogenics
- CNH International partnership with Nikola
- Michelin and Faurecia's *Symbio* JV
- Hyundai planning \$6.7B investment in fuel cells
- Nikola-VectoIQ business combination expected to provide \$750M in new capital



## 3 Perspective on Fuel Cell Commercialization

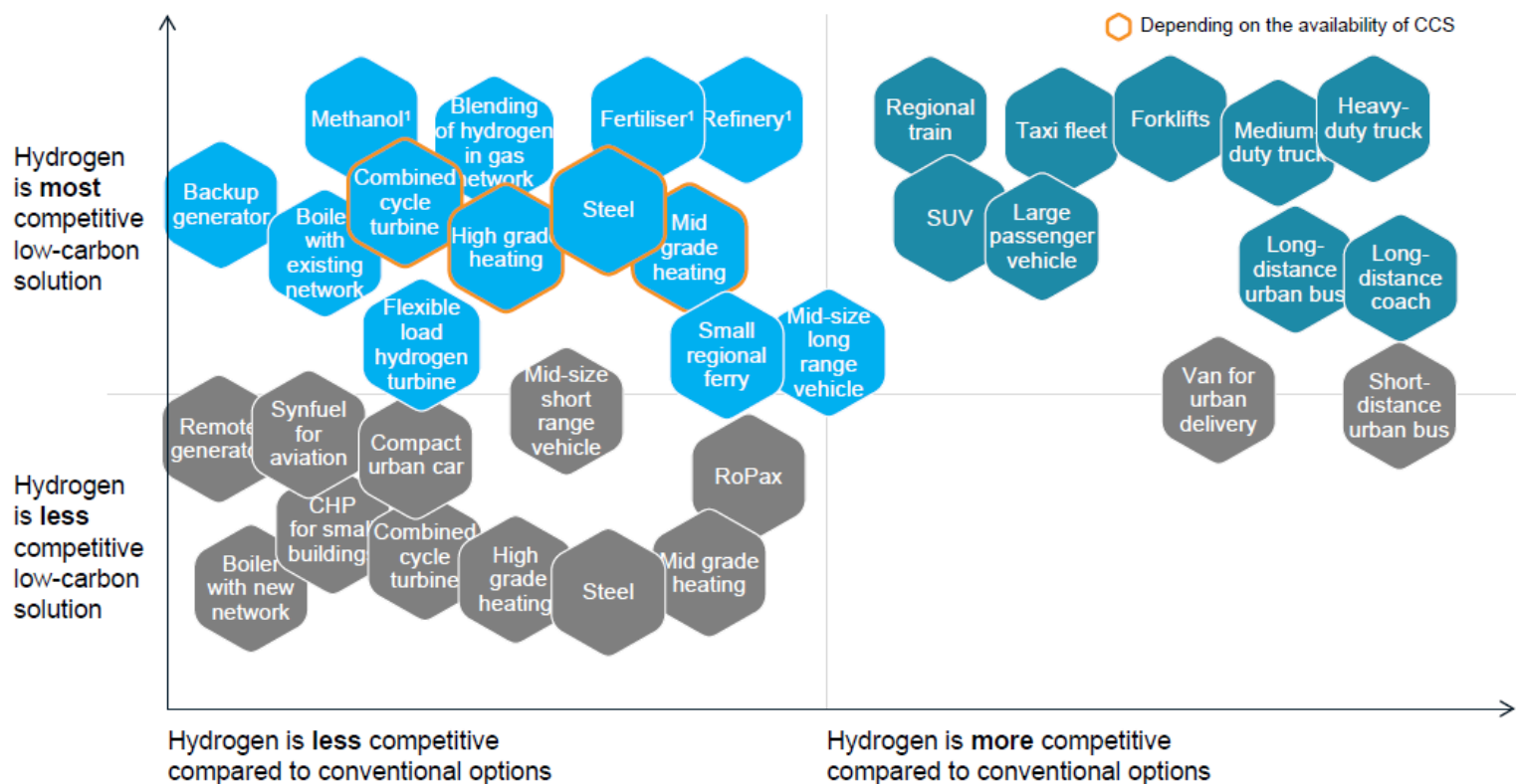
- Consolidated industry view → fuel cells offer a strong value proposition for Heavy- and Medium-Duty Motive applications
- FCEVs uniquely address requirements for heavy payloads, extended range & rapid refueling
  - Including for buses, commercial trucks, trains, marine vessels
- FCEVs also offer significant environmental benefits







## Exhibit 5 | Competitiveness of hydrogen applications versus low-carbon and conventional alternatives



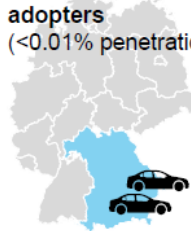
1. Hydrogen is the only alternative and low-carbon/renewable hydrogen competing with grey (optimal renewable or low-carbon shown)

## Exhibit 22 | FCEV and BEV infrastructure and operations cost over lifetime

### Cost of refuelling/recharging infrastructure investment and operations over lifetime (Germany use case)

USD/vehicle, thousands

Vehicle cost for first adopters  
(<0.01% penetration)



Lower HRS investment  
due to larger stations

**-60%**

Larger stations can  
serve more vehicles at  
lower cost

**-4x**

Vehicle cost at  
higher penetration  
(up to 20%)



Scale-up of  
compression centres  
and hydrogen trucking

**-50%**

**BEV**

16.0

Higher super-charger  
cost per vehicle

**+200%**

Higher utilisation of  
existing chargers

**-2x**

Investment into  
electricity grid to meet  
demand

**+700%**

4.7

5.4

7.6

SOURCE: McKinsey Center for Future Mobility

### Key Conclusions –

- TCO for commercial FCEVs will decline >50% within 10-years
- FCEVs will be less expensive than BEVs and ICE vehicles in a number of use cases by 2027, without subsidies





## 4 Fuel Cell Orders & Deployments

- Increasing number of FCEV orders and deployments in key geographies globally
- Currently ~18,000 fuel cell passenger cars in operation – supported by ~400 hydrogen fueling stations – primarily in California, Japan, South Korea, Germany
- There has been significant growth in Heavy- and Medium-Duty Motive deployments over the past year



## Fuel Cell Orders & Deployments - China

- 2019 production of ~3,000 FCEVs .... cumulative total of ~6,300
  - Ballard technology inside ~50%, with 2.1M km's of on-road experience
- 44 hydrogen stations in service, 41 under construction
- Phase I of the Gaoming Tram Line in Foshan City now in operation, with 5 trams powered by Ballard

## Fuel Cell Orders & Deployments - EU

- 20 FCEBs deployed in 2019; Ballard now powering 56 FCEBs in revenue service
  - Includes 8 Van Hool tram-buses in service in Pau, France
- 2019 orders for 67 Ballard modules for buses
- *H2Bus Consortium* announced, with goal of 1,000 FCEBs & H2 infrastructure by 2023





## Fuel Cell Orders & Deployments - EU (Cont'd)

- Emerging demand from marine sector
  - Order for 3 x 200kW modules for ELEKTRA push boat in Germany
  - Collaboration with ABB using 2 x 200kW for push boat in France
  - ESA with Norled for 2 x 100kW modules to power ferry in Norway
  - H2Ports consortium
- Establishing Marine CoE in Hobro, Denmark

## Fuel Cell Orders & Deployments – CA

- Ballard powering 36 FCEBs in California
  - 14 with SunLine; 11 with OCTA; 10 with AC Transit; 1 with UC-Irvine
- Demonstration programs continuing with UPS and Kenworth
- Globally Ballard has now powered Heavy- and Medium-Duty Motive vehicles more than 30M km's – equivalent to traveling around the world 750 times





## 5 Fuel Cell Advancement & Cost Reduction

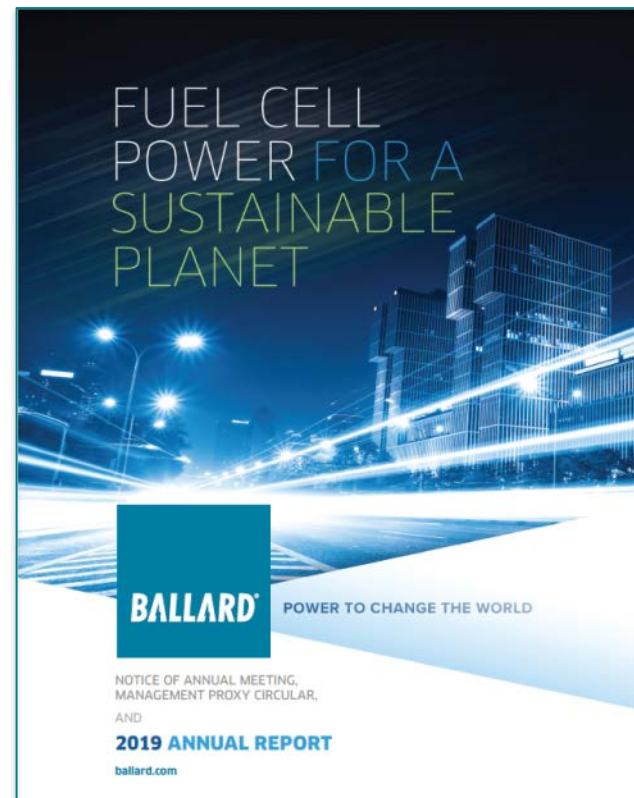
- Ballard product cost reductions of 65% over past 10-years
- 2019 launch of next-gen LCS fuel cell stack and FCmove™ power module
  - 35% lifecycle cost reduction over prior generation module
  - Technology advancements
  - Deeper value proposition
- Expect further significant product cost reductions over next 2-3 years
  - In alignment with Hydrogen Council-McKinsey TCO report and Deloitte China-Ballard TCO white paper





## 6 ESG – Environmental, Social & Governance

- ESG is an important and growing trend in the financial sector
  - Likely to drive significant capital reallocations
- Ballard has expanded priority and focus on ESG in the *2019 Annual Report*
  - Expecting to enhance and evolve ESG reporting over time



## Emerging Market Applications

- Anglo American order for 9 x 100kW modules to power 290-ton Ultra-class mining truck
- Product Development Agreement with Hydrogene de France for multi-MW scale stationary power system
- ESAs with adKor and SFC Energy for 500 x FCgen®-1020 stacks to power backup systems at German radio tower sites
  - Potential for up to 1,500 sites

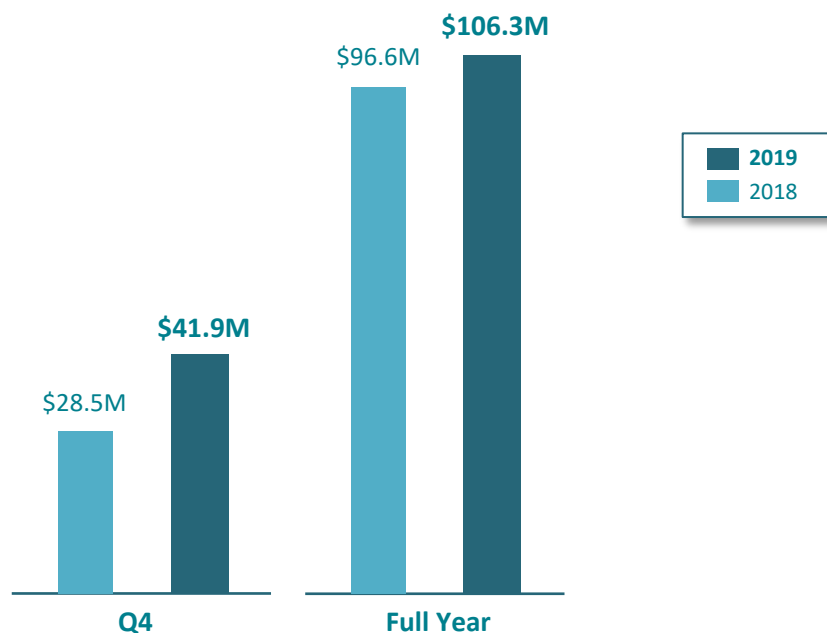
## Ongoing Investment

- Ballard continuing to invest in key areas:
  - Talent
  - Competencies
  - Innovation
  - Intellectual property
  - Technology
  - Product enhancements
  - Product cost reduction
  - Advanced manufacturing
  - Customer experience
- Focusing on market share, high growth, improving financials and shareholder value

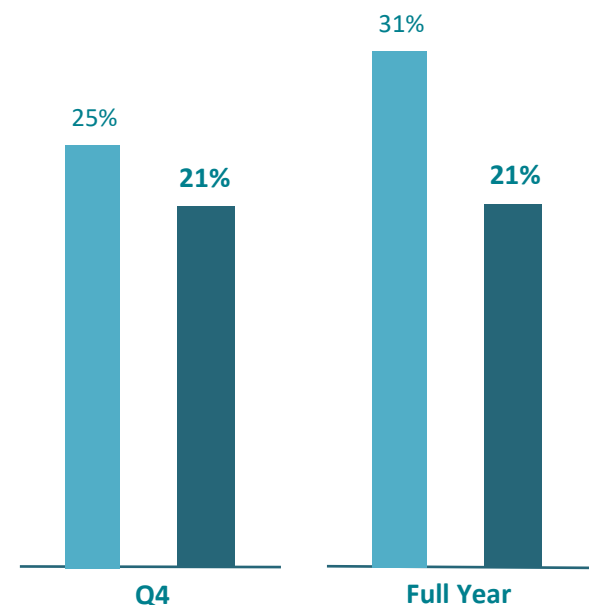


# Q4 & FY Revenue and Gross Margin

## REVENUE



## GROSS MARGIN

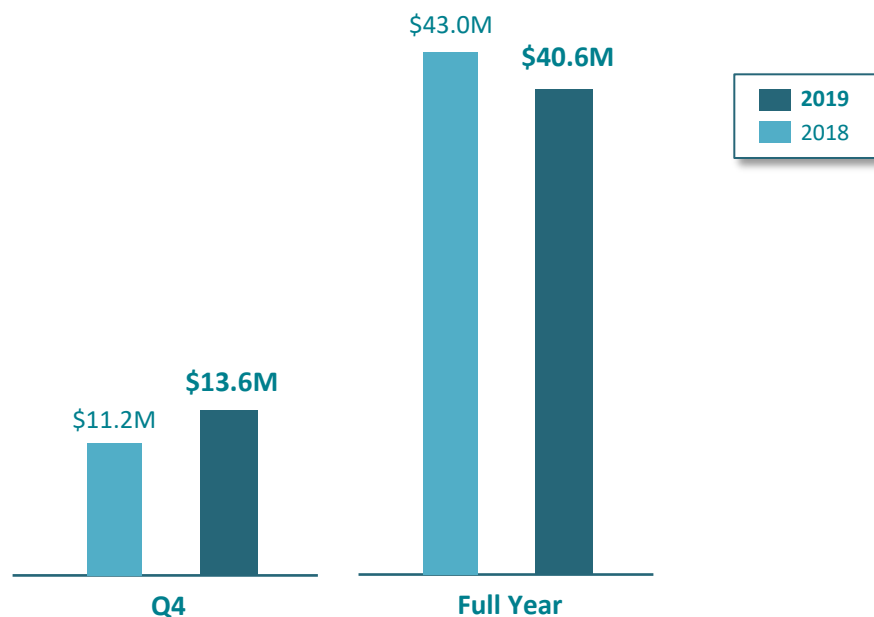


- **Q4 2019 Revenue +47%, to \$41.9M**
  - +63% Power Products, to \$25.5M
    - +101% Heavy Duty Motive, to \$21.4M
    - -66% Portable Power/UAV, to \$0.2M
    - -40% Material Handling, to \$1.9M
    - +47% Backup Power, to \$2.0M
  - +27% Technology Solutions, to \$16.4M

- **Q4 2019 Gross Margin -4-points, to 21%**
  - Reflects a shift in revenue and product mix

# Q4 & FY Cash Operating Cost Base and Adjusted EBITDA

## CASH OPERATING COST BASE \*



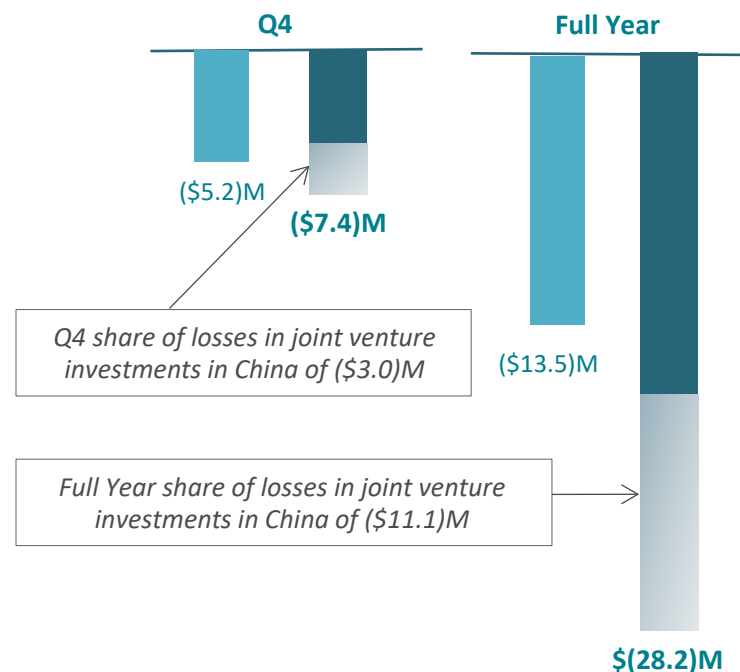
- Q4 2019 Cash Operating Costs +21%, to \$13.6M**

- Due to higher program development and engineering expenses incurred by European subsidiary to support marine applications

\* Measures operating expenses excluding stock-based compensation expense, depreciation and amortization, impairment losses or recoveries on trade receivables, restructuring charges, acquisition costs, impact of unrealized gains or losses on foreign exchange contracts and financing charges

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## ADJUSTED EBITDA #

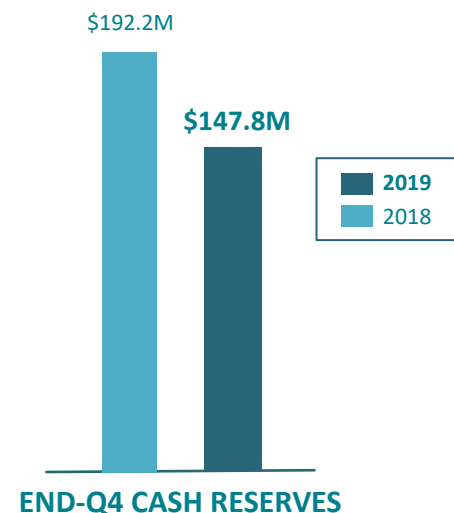


- Q4 2019:**

- Adjusted EBITDA (\$7.4)M
- Net Loss (\$10.3)M
- EPS (\$0.04)

# Measures EBITDA adjusted for stock-based compensation expense, transactional gains and losses, asset impairment charges, finance and other income, impact of unrealized gains or losses on foreign exchange contracts and acquisition costs

- **Q4 2019 Cash Provided By Operating Activities improved to \$4.1M**
  - Reflects cash operating losses of (\$3.9) million and capital inflows of \$8.0 million
- **End-Q4 2019 cash reserves of \$147.8M, down \$5.6M from the prior quarter**
- **Planning to launch \$75M ATM (At-The-Market) equity program**
  - To leverage strategic growth opportunities
  - Represents ~3% of current market cap
  - Efficient mechanism to enhance cash reserves: no price discount; relatively modest fees; and limited dilution to existing shareholders



# Order Backlog

**End-Q4 2019: Order Backlog<sup>1</sup> of \$178.7M and  
12-Month Order Book<sup>2</sup> of \$110.3M**

<b>ORDER BACKLOG</b>	Order Backlog at End-Q3 2019	Orders Received in Q4 2019	Orders Delivered in Q4 2019	Order Backlog at End-Q4 2019
<b>Total Fuel Cell Products &amp; Services</b>	<b>\$199.6M</b>	<b>\$21.0M</b>	<b>\$41.9M</b>	<b>\$178.7M</b>

<sup>1</sup> *Order Backlog* = aggregate value of orders received

<sup>2</sup> *12-Month Order Book* = aggregate value of that portion of Order Backlog expected to be delivered in the subsequent 12-month period



# Q & A

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