

# INVESTOR PRESENTATION

MARCH 13, 2017



## BALLARD POWER SYSTEMS

PUTTING FUEL CELLS TO **WORK**

*The Power of Fuel Cells, Simply Delivered*

**BALLARD**<sup>®</sup>

[WWW.BALLARD.COM](http://WWW.BALLARD.COM)

# 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 Protonex Technology Corporation results and are in U.S. dollars, unless otherwise noted.*

# Investment Thesis

**BALLARD®**

## BALLARD INVESTMENT RATIONALE

1.

### Global Leadership Position in Fuel Cells

- 30 years in PEM technology; unrivalled field experience; brand strength

2.

### Converging Macro Trends

- GHG reduction; air quality improvement; electrified propulsion systems

3.

### Diversified Business Model

- Multiple growth platforms & applications; geographic reach

4.

### High Growth Trajectory

- Organic growth (\$87M committed orders for 2017 delivery) + M&A

5.

### Capital Efficiency

- China strategy; gross margin expansion; strong liquidity

6.

### Embedded Optionality

- Long-term exposure in automotive, UAV's & military

# Ballard's Global Leadership Position in Fuel Cells

# BALLARD®

## WHAT WE DO

- Ballard is a changing force in clean energy through global market leadership in PEM fuel cell technology & products

## SELECT FUEL CELL PRODUCTS



**FCvelocity®-9SSL**

Liquid-cooled  
fuel cell stack

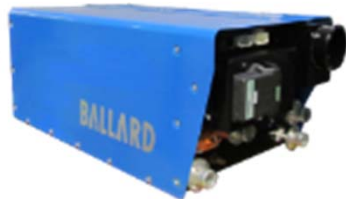


**FCgen®-1020ACS**

Air-cooled  
fuel cell stack

**FCveloCity®-MD**

30kW fuel  
cell engine



Ballard HQ facility  
Vancouver, B.C., Canada

## CORPORATE BACKGROUND

- 38 years' experience
- 24 years on TSX, 22 on Nasdaq
- 475 employees
- 2,000 patents & applications
- Most recognized brand globally in PEM fuel cells
- 4 strategic shareholders

## UNRIVALLED EXPERIENCE

- 3.0M MEAs manufactured
- 320MW fuel cells shipped
- 10M kilometers bus revenue service
- 120M hours forklift run time
- 1M hours stationary system backup power run time

# Strategic Shareholders

## Validation from Market Leaders

# BALLARD®

17.4% of Ballard shares held by 4 leaders in their respective industries....

% O/S\*



\* Total O/S = 174.1M shares as of end-Q3 2016

# Tailwinds In Our Sails

## *Timely Convergence of Macro Trends*

**BALLARD®**

✓ **Increased Focus on Climate Change, Air Quality & Energy Security**

- Ratification of UN Convention on Climate Change (Paris Accord)

✓ **Growth of Clean Energy Options**

- Major cities looking to ban diesel – including London, Paris, Madrid, Athens, Mexico City, metro centers in China

✓ **Complementary Role for Fuel Cells in Electrified Propulsion**

- Including mass transit & commercial vehicles in China, Europe and U.S.

✓ **Resurgence of Interest in Fuel Cell Cars**

- Global automotive OEM's pursuing fuel cell programs – including Toyota, Hyundai, General Motors / Honda, Daimler, VW Group, China OEM's

# Diversified Business Model

## Multiple Growth Platforms



### POWER PRODUCTS

*Delivering high value, clean energy products that reduce customers' costs and risks*

**BAE SYSTEMS**



NEW FLYER



KING LONG  
金龙客车



ARMY STRONG.



Cross-Leveragable

### TECHNOLOGY SOLUTIONS

*Solving difficult technical and business challenges in customer's PEM fuel cell programs*

**VOLKSWAGEN**

AKTIENGESELLSCHAFT



**CRRC**



**NISSHINO**

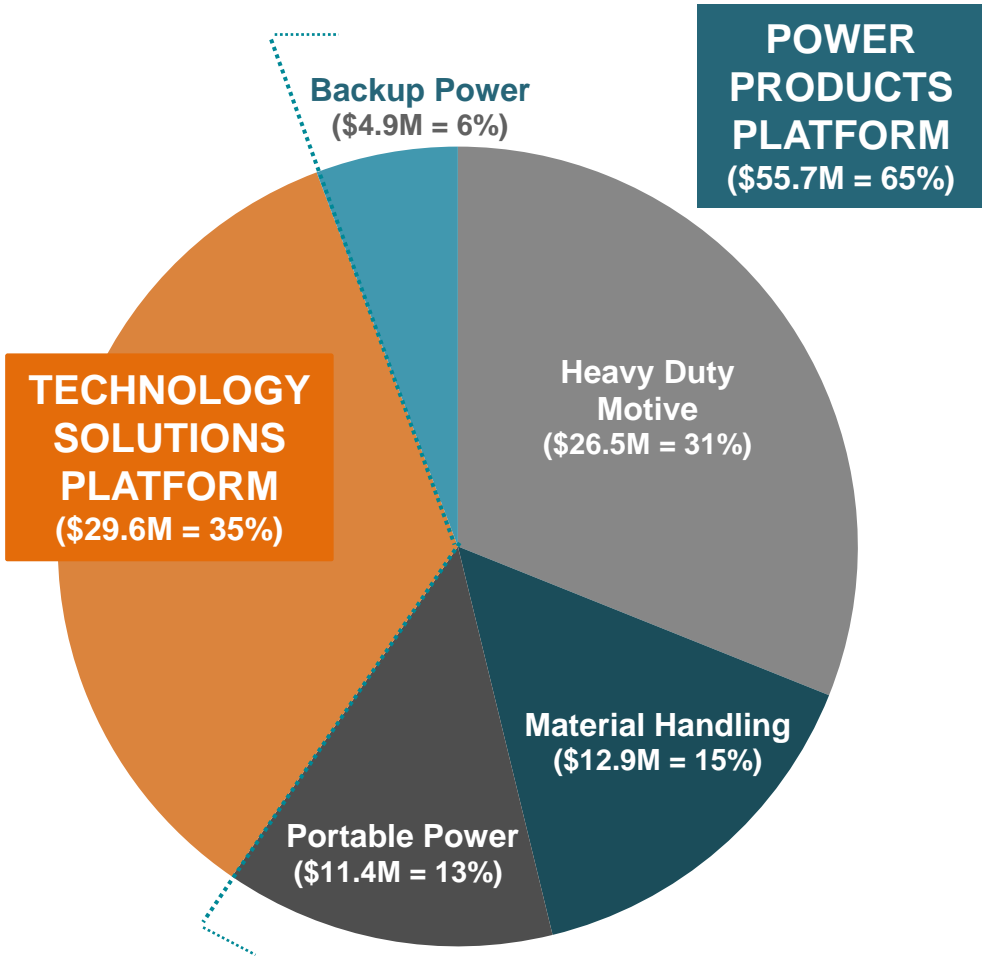
# Diversified Business Model

## Extensive Applications & Geographic Reach

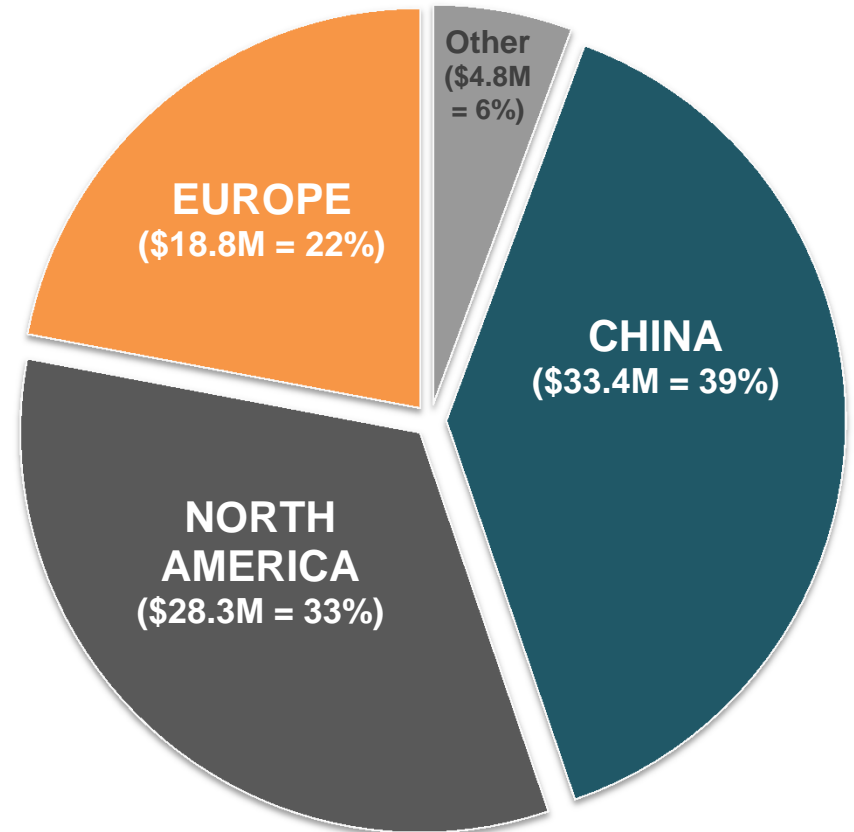


**\$85.3M 2016 REVENUE ....**

### APPLICATIONS –



### GEOGRAPHIC REACH –





# Penetrating High-Growth Markets 'Greenshoots' + Longer-Term Opportunities



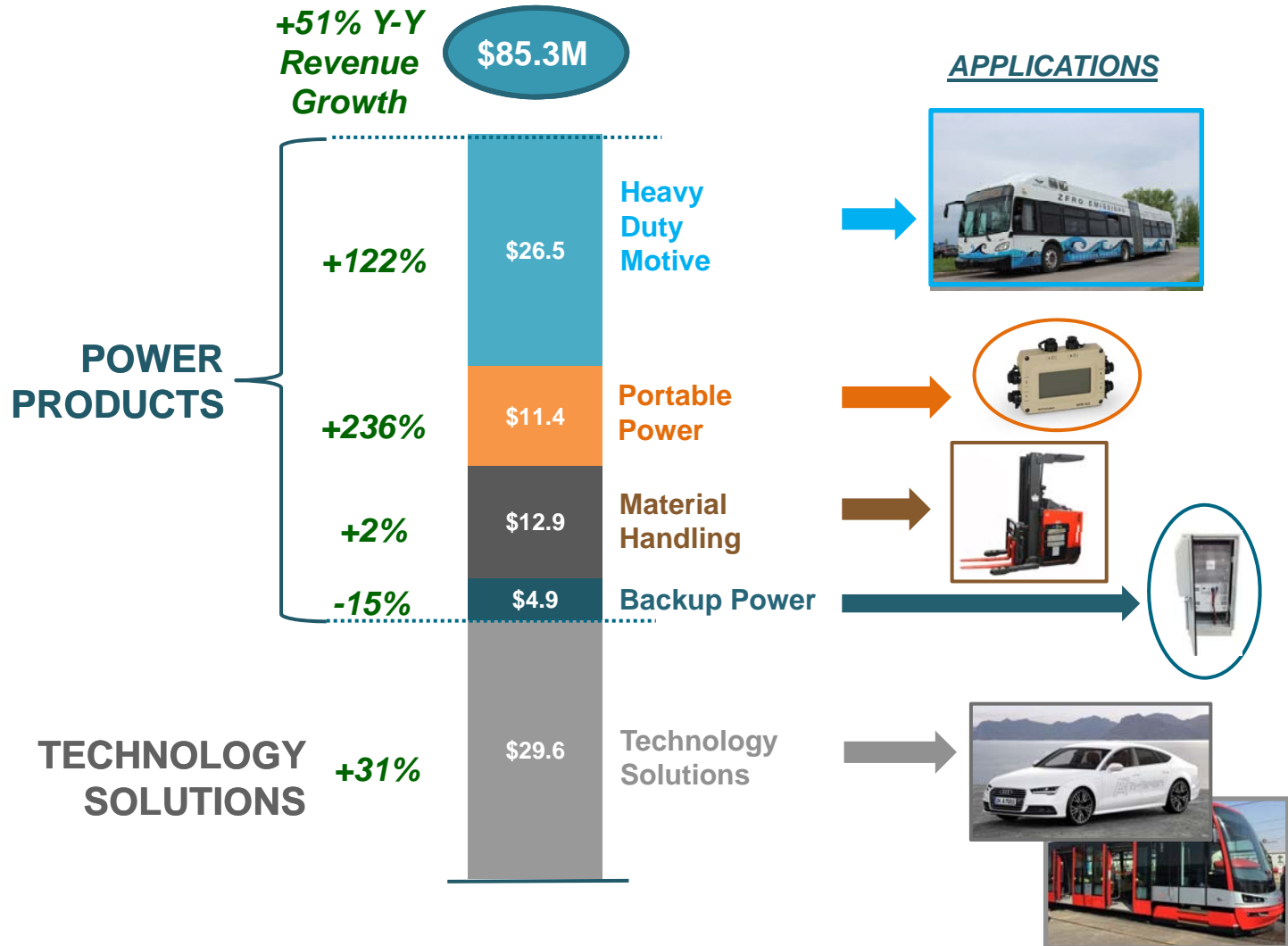
**\$85.3M 2016 REVENUE ....**

**SCALING THE BUSINESS:**

**Organic growth**  
(2017 record committed orders)

**AND**

**Complementary M&A transactions**  
(Q4 '15 Protonex acquisition)



# Ballard's China Strategy



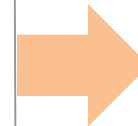
## Supply Chain Localization:

- Risk adjusted
- Capital light
- IP protected



**Addressing Accelerating Demand for 'Green' Energy with a Compelling Solution**

<b>MEA Production Remains at N/A HQ</b>	<ul style="list-style-type: none"> <li>• Membrane Electrode Assembly ("MEA") represents 60%+ of fuel cell value</li> <li>• IP embedded in manufacturing</li> <li>• MEAs to be sold to JVCo in China</li> </ul>
<b>Fuel Cell Stack Manufacturing Localized in China</b>	<ul style="list-style-type: none"> <li>• China FCvelocity™-9SSL JVCo in-place (90% Synergy / 10% BLDP for \$1M, no BLDP capex or opex)</li> <li>• \$170M revenue to Ballard over 5-years (min. annual MEA "take or pay" volumes for \$150M)</li> <li>• Operation on track to begin late-2017</li> </ul>
<b>Licenses For Fuel Cell Engine Assembly</b>	<ul style="list-style-type: none"> <li>• Technology transfer, license &amp; supply deals, including Broad-Ocean in 3 cities with \$25M estimated value to Ballard over 5-years</li> <li>• Broad-Ocean deal expected to close in Q2 2017</li> </ul>



**LARGE ADDRESSABLE MARKET**

- Aggressive climate change targets in China's 5-Year Plan
- Significant subsidies for fuel cell products & infrastructure (*fuel cell bus cost approx. equal to diesel bus*)
- Largest mass transit bus market globally (~300,000 units built in 2015)

**SIGNIFICANT EARLY DEMAND**

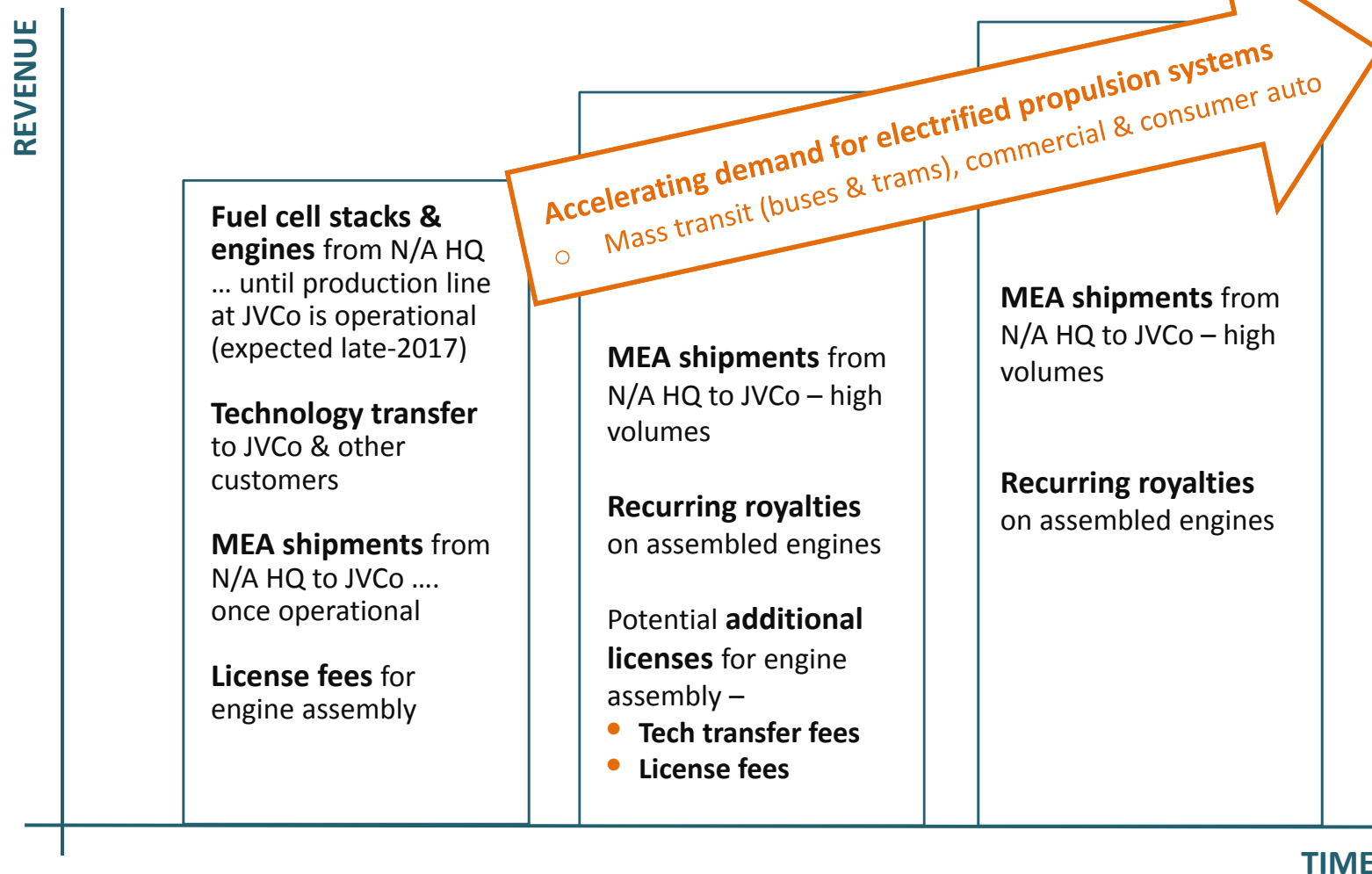
- Ballard order for engines to power >300 fuel cell buses
- Broad-Ocean order for 10,000 commercial fuel cell vehicles
- Ballard development program with CRRC, largest global train OEM

# Ballard's China Strategy

## Revenue Streams

# BALLARD®

*Accelerating demand for clean energy transportation will drive growth in revenue to Ballard from MEA sales, licensing & recurring royalties....*



# Embedded Optionality



Longer-term opportunities in future growth areas include –

**Automotive** Currently working with 4 global auto OEMs, including Volkswagen Group / Audi AG



Audi's H-tron Quattro concept vehicle



Insitu Scan Eagle UAV

**Unmanned Aerial Vehicles (UAV's)**  
Testing our fuel cell propulsion system with Insitu, a Boeing company, plus another major aerospace customer

**Military** Power Manager products enable optimized power utilization by soldiers in the field, while reducing battery weight



Squad Power Manager – SPM 622

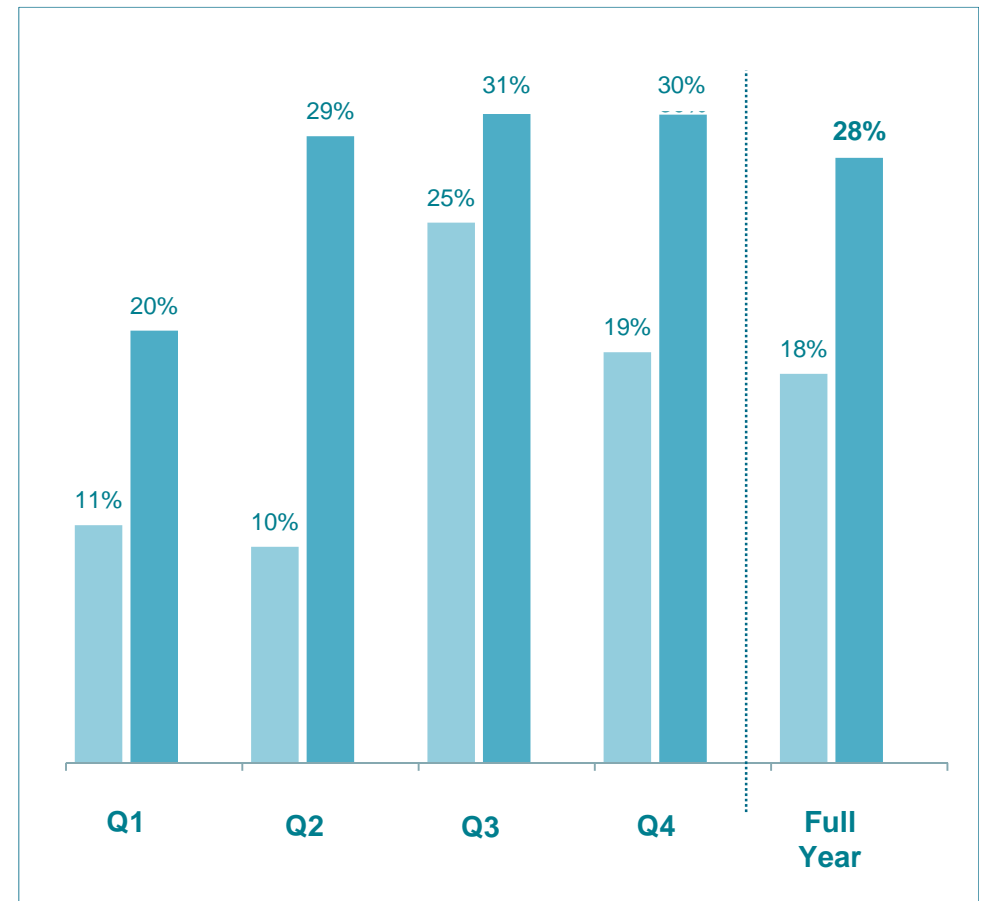
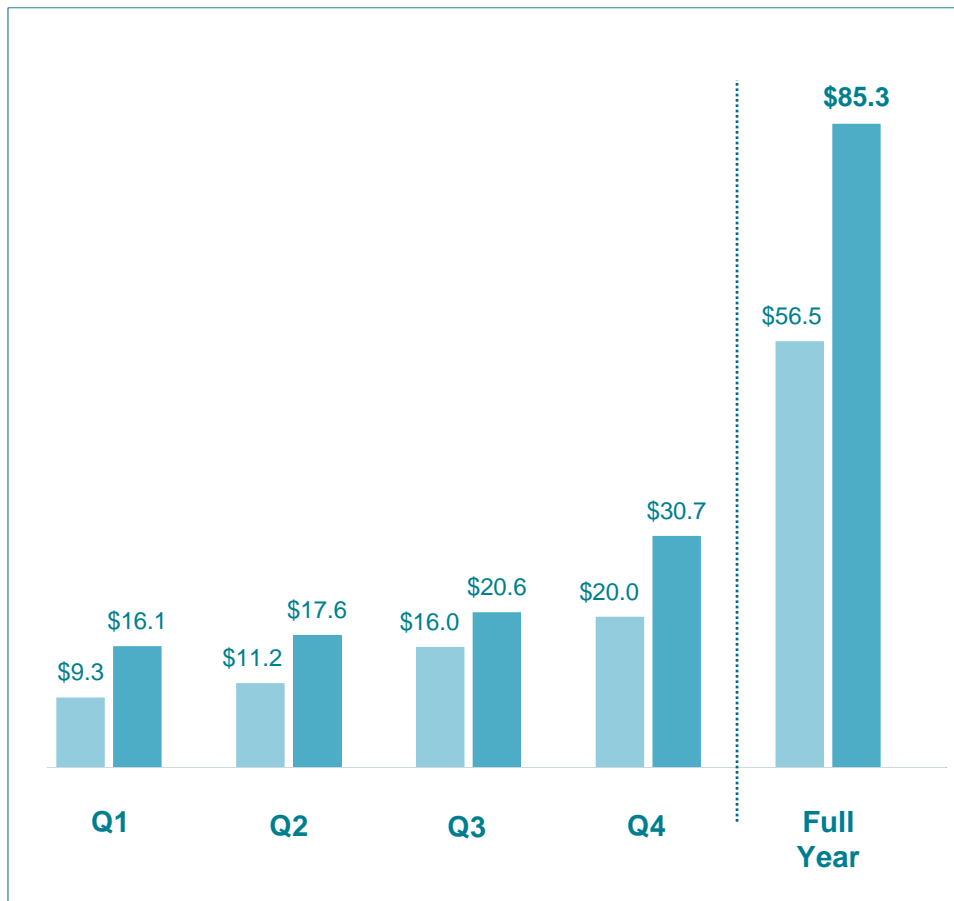
# Quarterly & Full Year Revenue (\$M) and Gross Margin (%)

# BALLARD®

## REVENUE

## GROSS MARGIN

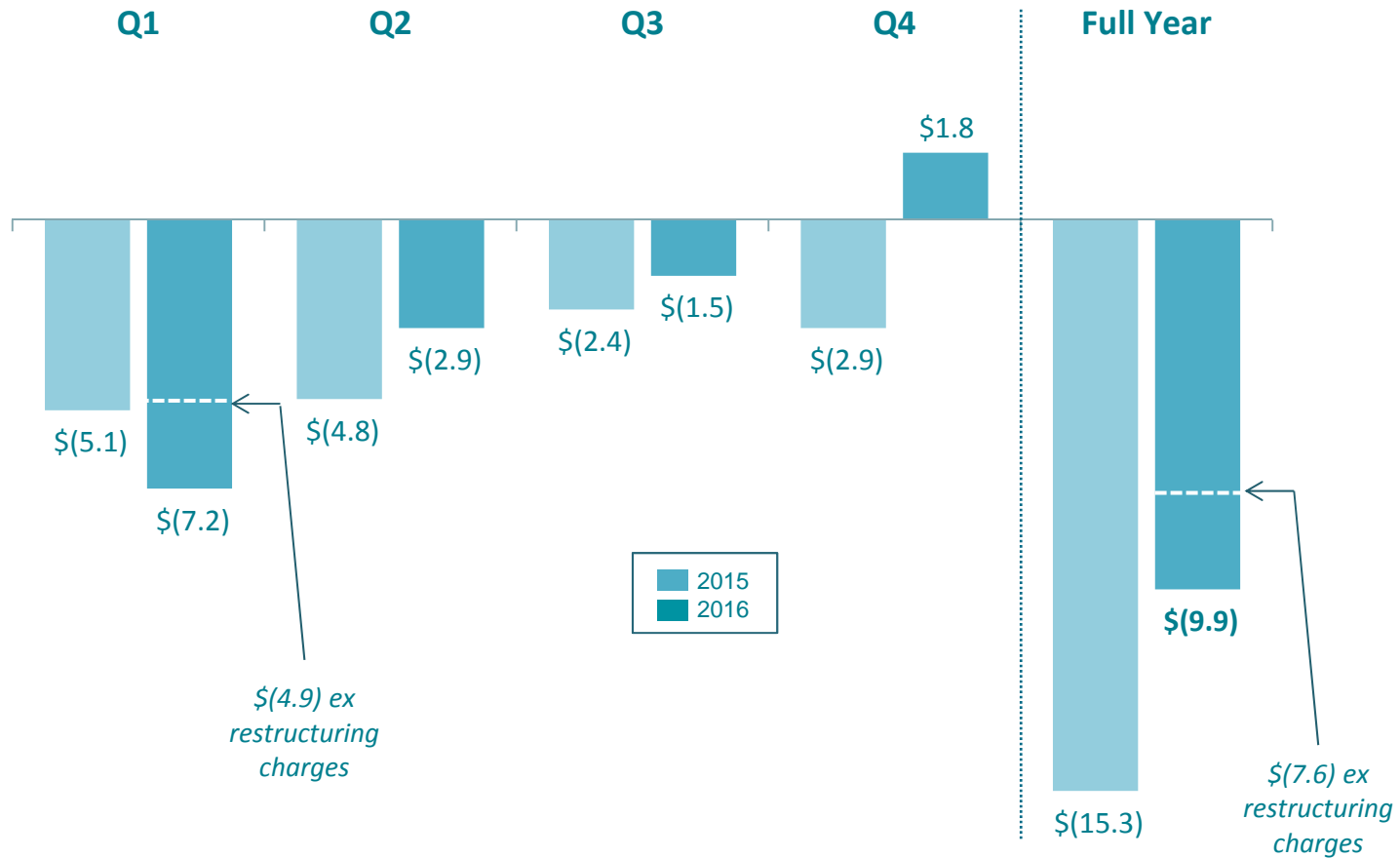
■ 2015  
■ 2016



# Quarterly & Full Year Adjusted EBITDA (\$M)



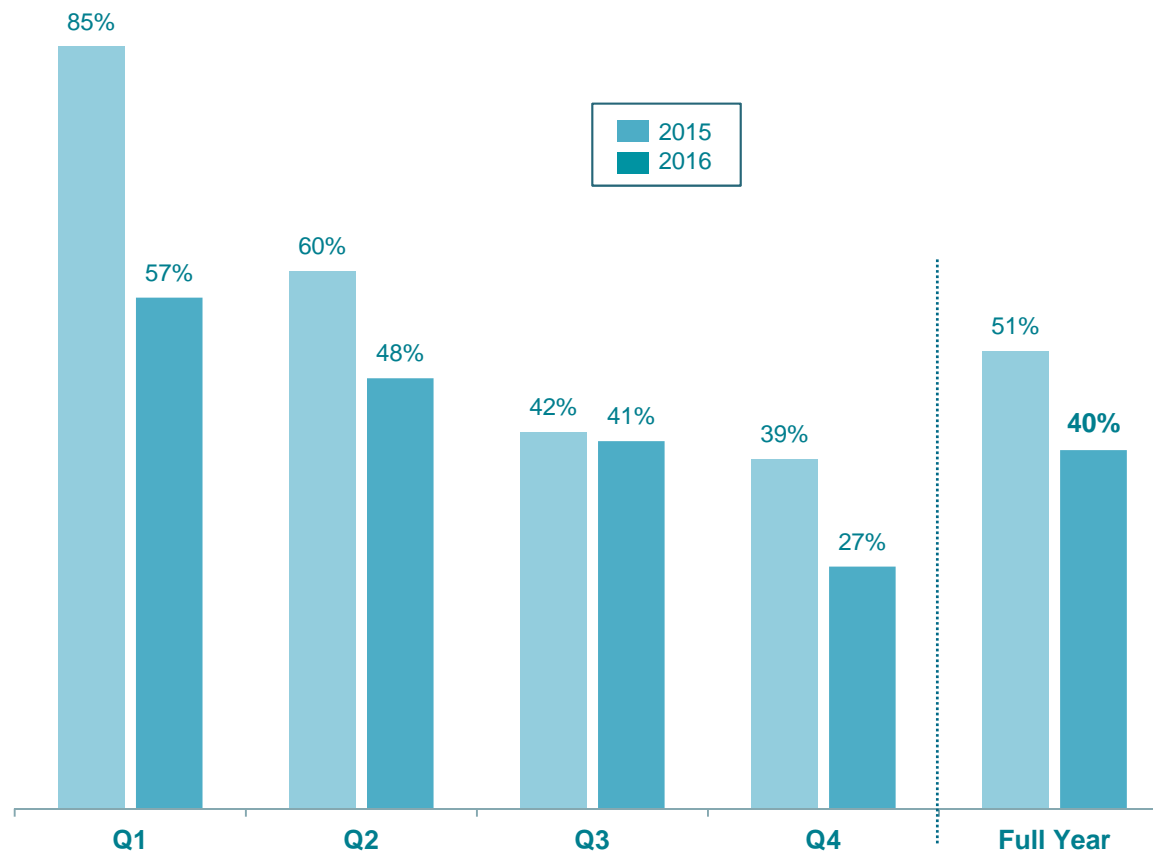
## ADJUSTED EBITDA



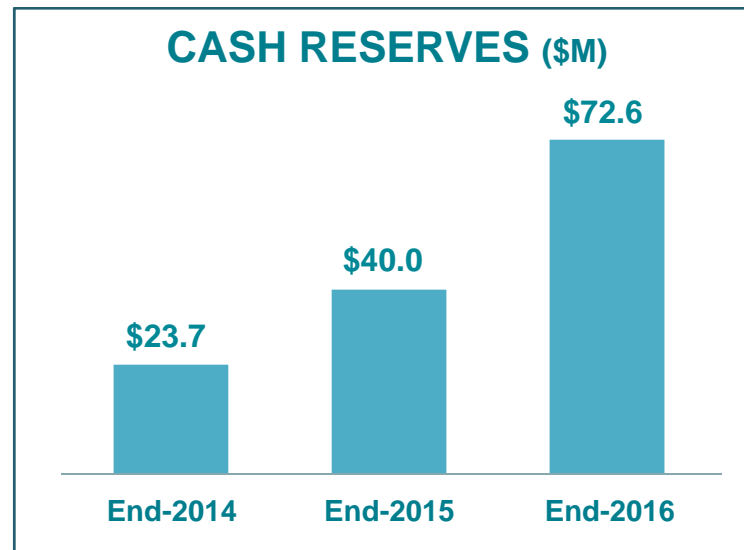
# Quarterly & Full Year Operating Leverage (%)

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## CASH OPERATING COSTS AS PERCENT OF REVENUE



- Full Year 2016 Cash Used by Operating Activities improved 85%, to (\$3.9)M
- End-2016 cash reserves of \$72.6M, +81% from end-2015
  - No debt





# Investment Thesis

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## BALLARD INVESTMENT RATIONALE



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MARCH 2017



## BALLARD POWER SYSTEMS

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