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BALLARD®

The Near-Term Path to Fuel Cell Bus Commercialization

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■ A Clean Energy Growth Company | WWW.BALLARD.COM | **TSX: BLD** **NASDAQ: BLDP**

About Ballard

- **Company founded in 1989, ~400 employees**
- **Portfolio of proven fuel cell solutions**
- **Strong delivery capabilities:**
 - Unrivalled IP portfolio with  **esencia™** technology in every product
 - High volume manufacturing facility, 100MW+ of fuel cell products shipped



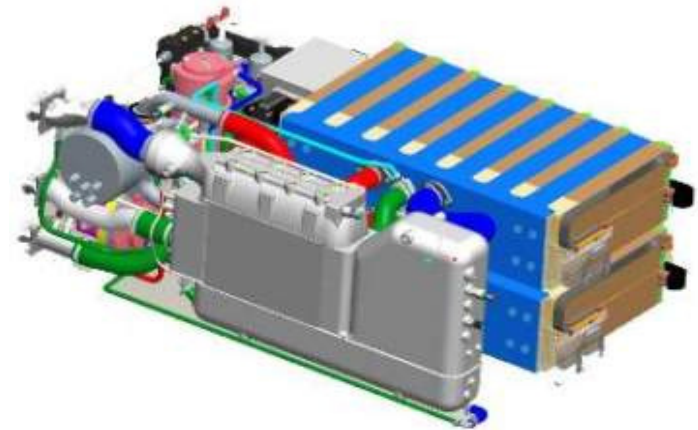
FCvelocity[®]-HD6

■ Unique features...

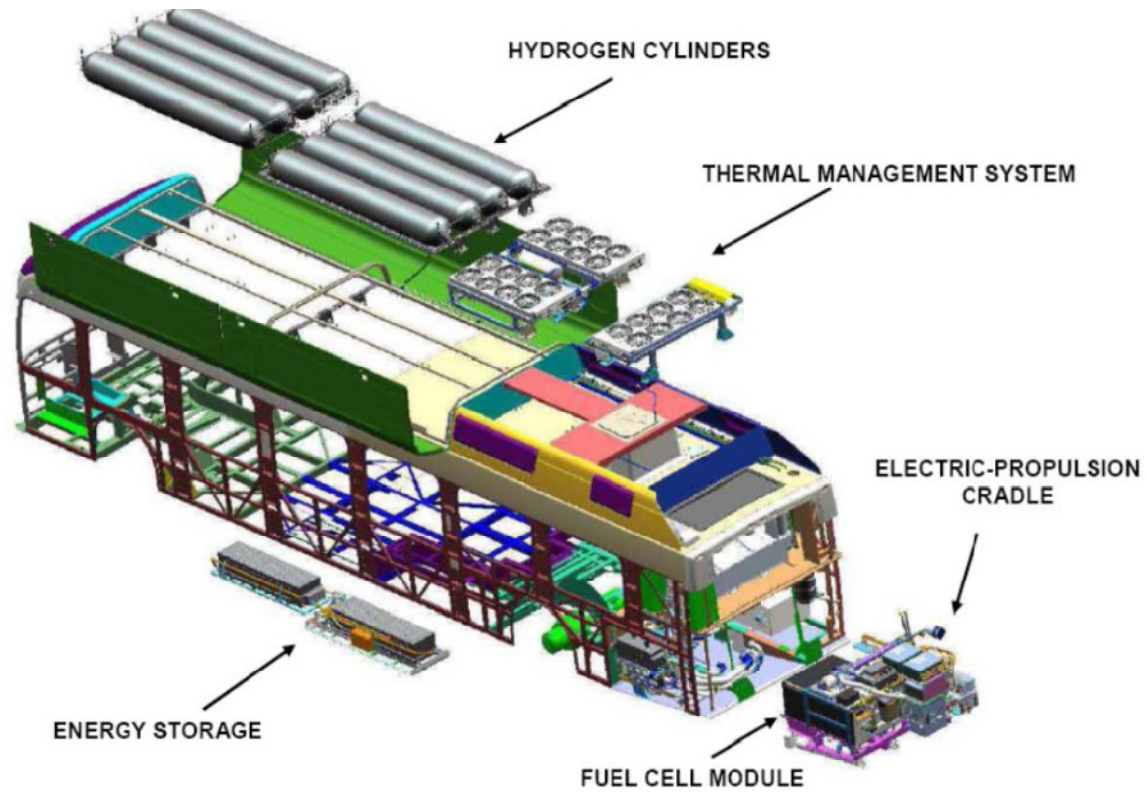
- Power density: 400 kgs, delivering 150 kW gross power
- Leveraging state of the art automotive stack technology (economies of scale)
- Offered with a 12,000 hr or 5 yr warranty
- Available in 150 or 75 kW configurations to appropriately match bus type and application



FCvelocity[®]-HD6



Integration into a Hybrid Electric Drive



Powering the Largest FC Hybrid Fleet in the World

- **The fleet has exceeded 1.4 million kilometres in revenue service**

Operations began in Q1 2010, fleet leader is at 72,000 km's

Positive feedback from transit users and drivers

The largest fuel cell hybrid bus fleet in the world

- **Not without challenges...**

Full fleet availability has been limited by some component failures e.g. control boards, auxiliary heaters



Other 6th Generation Bus Programs

London Bus Fleet



2010 – 2014

UNDP Brazil



2010 – 2012

Sun Line



2010 – 2014

APTS



2010 - 2015

Oslo Fleet



2011 - 2016

Fleet Size

8

1

2

4

5

Transit



FC Power

75 kW

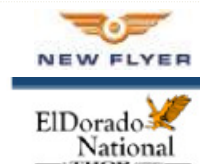
150 kW

150 kW

150 kW

150 kW

Coach Manufacturer

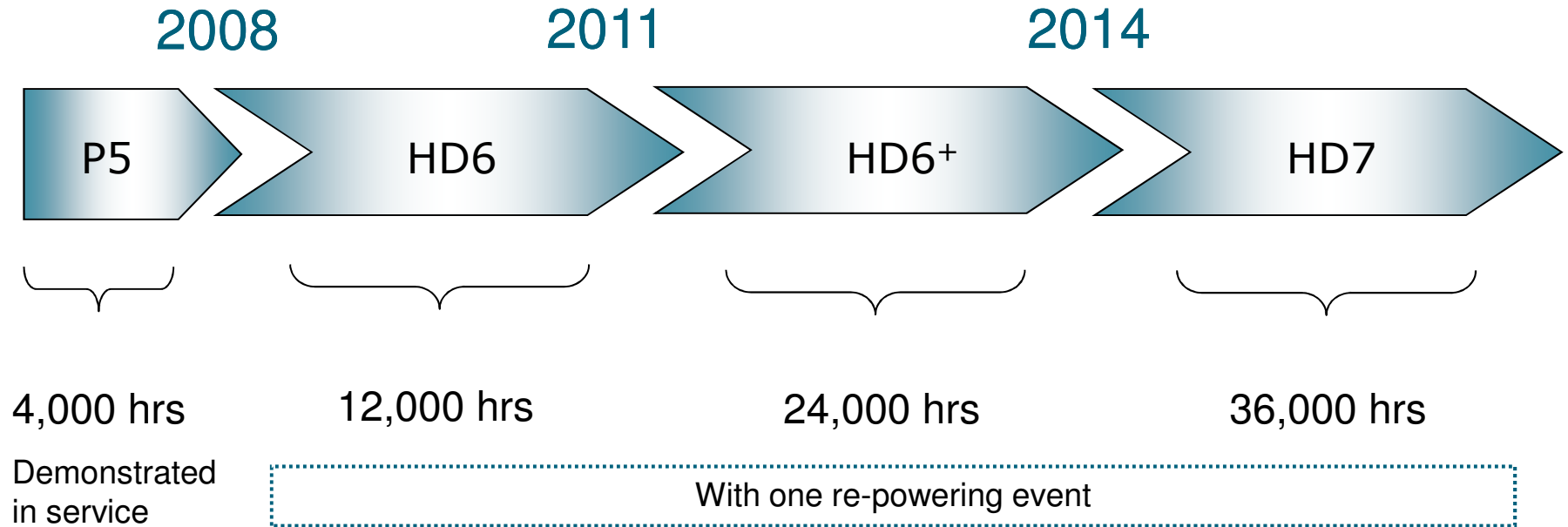


System Integrator



BALLARD

Product Durability Targets





Fuel Cell Bus Commercialization

BALLARD®

Putting fuel cells to work

