

AMERICAN FUEL CELL BUS

HybriDrive®
PROPULSION SYSTEMS

The American Fuel Cell Bus (AFCB) program targets the Federal Transit Administration's (FTA) objectives of leveraging improvements and innovations from this and previous demonstration programs to achieve a commercially viable, Buy America - compliant fuel cell bus product.

This pre-production prototype vehicle utilizes a heavy duty urban transit bus platform from ElDorado National, which includes a Ballard FCvelocity® -HD6 fuel cell, and BAE Systems HybriDrive propulsion system featuring:

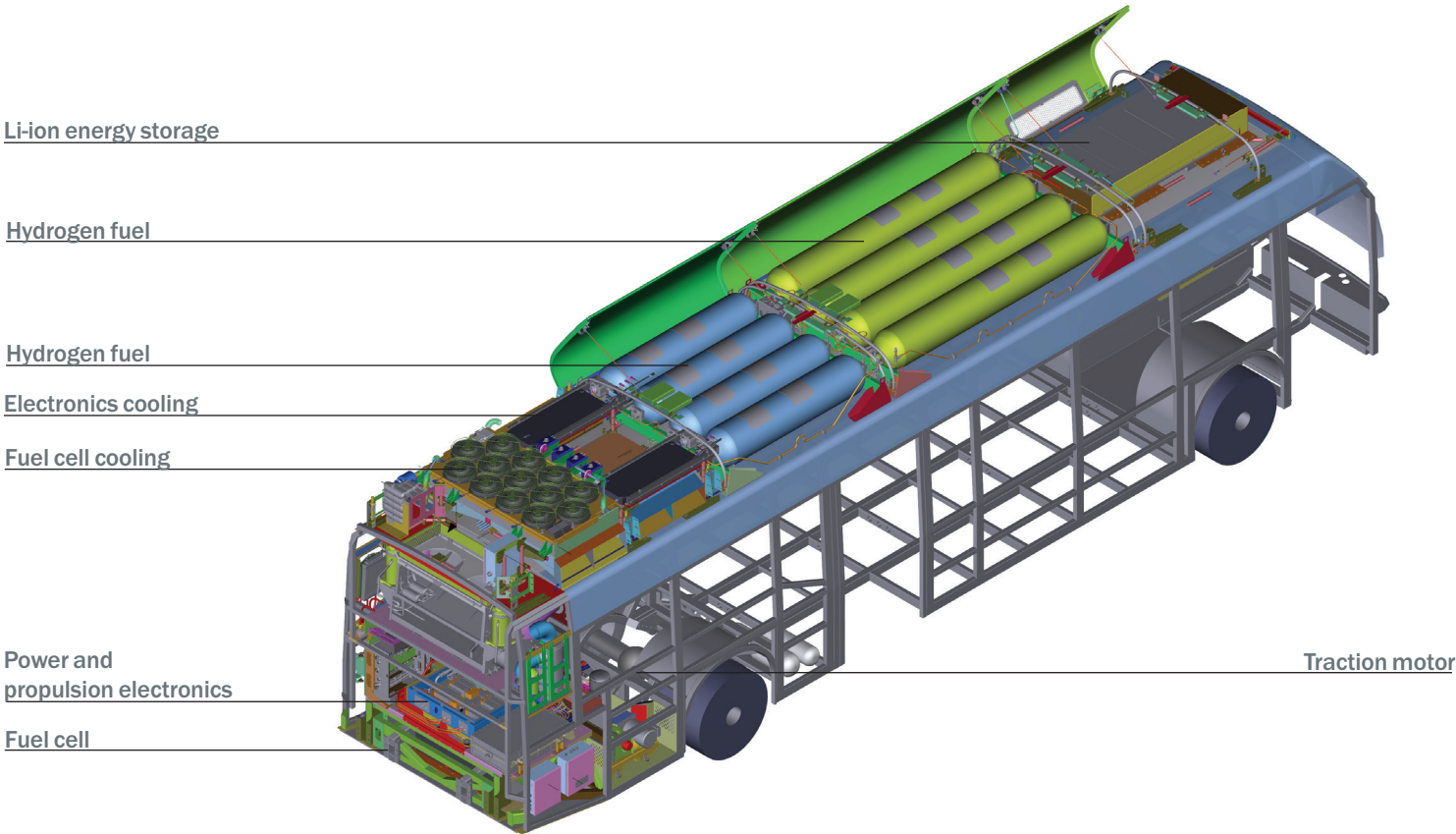
- Zero emissions; Hydrogen is the sole fuel source
- Full suite of electrically powered accessories
- Light weight, nano-phosphate lithium-ion battery technology providing greater power
- Quieter, more comfortable ride
- Reliable, proven technology
- Ease of maintenance

BAE Systems is a major provider and integrator of propulsion and electrical accessories on fuel cell buses. These buses feature the BAE Systems HybriDrive® propulsion system, a 200kW series hybrid system containing advanced lithium-ion energy storage and an AC traction motor that provides smooth acceleration, regenerative braking and increased fuel economy. BAE Systems has recently delivered the American Fuel Cell Bus under the National Fuel Cell Bus Program.



BAE SYSTEMS

AMERICAN FUEL CELL BUS



Item	Description
Bus chassis/model	EIDorado National 40' AXESS
Curb weight	34,800 lb (15,785 kg)
Seats/stands	37 plus driver/19 standees
Power plant	Ballard Power Systems FCvelocity® -HD6, 150 kW fuel cell
Hybrid system	BAE Systems Series HybriDrive® propulsion system
Electrical energy storage	200 kW, 11.2 kWhr nanophosphate Li-ion energy storage
Accessories	Electronic alternator, electrically driven cooling systems, HVAC, power steering, and air compressor
Fuel storage	Gaseous hydrogen: 50 kg at 350 bar
Range	260 miles (418 Km) under typical urban transit cycle and loads
Length, width, height	493.5 in (12.5 m) L; 102 in (2.6 m) W; 139 in (3.5 m) H

BAE Systems
1701 North Street
Endicott, NY 13760

BAE Systems
Marconi Way
Rochester Kent ME1 2XX

www.hybridrive.com

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