

FOR IMMEDIATE RELEASE: MARCH 11, 2010  
*\*HIGH RESOLUTION PHOTOS & MEDIA AVAILABLE*

## **HYDROGEN HYBRID BUS BRINGS ALTERNATIVE FUEL DEMONSTRATION TO VICTORIA, BRITISH COLUMBIA**

*Center for Transportation and the Environment, BC Transit, Proterra and the U.S. Federal Transit Administration Team Up for Bus Demonstration & Expert Panel*

**VICTORIA, B.C.** – An innovative hybrid electric fuel cell bus has recently made its debut in Canada with a month-long demonstration in Victoria, British Columbia through the province's public transportation provider, BC Transit, with support from Transport Canada. The Hydrogen Hybrid Bus (HHB), was built by Golden, Colorado-based Proterra with funding from the U.S. Federal Transit Administration (FTA) as part of the National Fuel Cell Bus Program, and is managed by the Center for Transportation and the Environment (CTE).

The HHB, which represents state-of-the-art alternatively-fueled transit technology, recently made the trek from its home in Columbia, South Carolina to the provincial capital as the result of a partnership between the CTE, Proterra, BC Transit and the FTA.

The HHB is operating via "shadow" service on existing bus routes through the city, adding hilly, cold weather operations to the ongoing evaluation of the bus. The bus received significant positive exposure by operating throughout the Winter Olympic Games and was featured as part of a formal demonstration and media event on March 11, sponsored by the Southern Hydrogen & Fuel Cell Coalition (SHFCC). Speakers included BC Transit President and CEO Manuel Achadinha, CTE Executive Director Dan Raudebaugh and Proterra Founder Dale Hill.

The HHB, a 35-foot, composite-bodied transit bus, is powered by lithium titanate batteries and two 16-kilowatt hydrogen fuel cells, producing clean electric power in a lighter, quieter, and more aerodynamic design that is better suited for today's transportation demands. The HHB's only emission is water vapour. Although the bus was certified for use in the U.S., it successfully underwent additional testing and safety inspections in order to be driven in Canada.

"Showcasing the Hydrogen Hybrid Bus among BC Transit's fleet in Victoria for a few weeks this winter is the result of a strategic U.S. & Canadian partnership of public agencies, private companies and non-profit organizations, and is a great model that we can replicate with other transit agencies across North America," said Jason Hanlin, Director of Technology Development, CTE. "The demonstration of the HHB in Victoria during a time of increased tourism and international attention on British Columbia for the Winter Olympic and Paralympic Games is a huge opportunity to promote environmentally sound transit."

"Largely due to the support of U.S. FTA," Hanlin added, "these clean, resourceful technologies are able to be developed, evaluated, and introduced into the market place."

“We are thrilled to see the enthusiasm at BC Transit for Proterra’s advanced transportation technology solution and we appreciate their interest in taking a leadership role in Canada with the trial of our vehicle,” said Proterra founder Dale Hill. “As we ramp up full-scale manufacturing of our market leading high efficiency transit bus, we look forward to working with BC Transit and others to transform their city streets with these quiet, modern-looking zero emission vehicles. With more than twice the energy efficiency of other hybrid buses and four times that of conventional diesel buses, Proterra’s buses combine tremendous environmental benefits with substantial cost savings to the operator.”

“As leaders in identifying cleaner transit solutions and testing green technology, this demonstration is yet another example of how BC Transit continually works to provide innovative, efficient and sustainable transportation options,” said President and CEO of BC Transit, Manuel Achadinha.

#### Hydrogen Hybrid Bus Details:

- The HHB is a series-electric hybrid bus that was purpose built for an electric drive train and can be configured with a wide variety of 'engines' or as battery-electric only. This version uses clean fuel cells as the 'engine'.
- The HHB carries 29 kilograms of hydrogen on board and can achieve up to a 480-kilometre range.
- The use of composite materials for the body make it much lighter – and stronger – than conventionally-built buses.
- Initial BC Transit evaluation has determined that the fuel economy for this bus in shadow service is approximately 70% better than typical 40' diesel buses.
- South Carolina and the University of South Carolina were selected as the primary site for the bus demonstration and evaluation because of their prominence in fuel cell and hydrogen research.
- The HHB meets Buy America Requirements while utilizing fuel cells provided by Hydrogenics (headquartered in Mississauga, Canada) representing a great US/Canadian partnership for technology development and job creation.

The Hydrogen Hybrid Bus was deployed in August 2009 and is engaged in a two-year demonstration and evaluation project to prove the feasibility of advanced, hydrogen fuel cell technology applications for mass transit. The demonstration and evaluation project will be conducted in three cities; Columbia, SC, Austin, TX, and Victoria, B.C. Upon completion of the BC Transit demonstration, the bus will return to Columbia to continue its evaluation as part of the University of South Carolina shuttle fleet.

#### **About CTE**

Founded in 1993, The Center for Technology & the Environment (CTE) is a member-based, nonprofit organization that facilitates research, development, and demonstration of advanced transportation technologies, vehicles, and fuels to improve air quality and achieve energy and environmental sustainability. CTE has played a pivotal role in the development and implementation of many clean, advanced transportation technologies throughout the United States. In partnership with federal, state, and local stakeholders, the organization has managed

a portfolio of more than \$170 million in cost-shared projects involving over 450 organizations. The Southern Hydrogen & Fuel Cell Coalition (SHFCC), an initiative of CTE, began in 2004 to seed the development of hydrogen and fuel cell capabilities throughout the Southern U.S. For more information about CTE, our members, and our projects, please visit: [www.cte.tv](http://www.cte.tv)

### **About Proterra**

Answering the international call for efficient, cost-effective and environmentally responsible transit solutions, Colorado based Proterra has been designing and manufacturing the world's most efficient commercial vehicle technologies since 2004. With hybrid and battery-electric buses that are built from the ground-up in Colorado, Proterra has patented clean transit technology serving the commercial sector with solutions from delivery vans to transit buses to Class VII trucks.

□ 30 □

### **Media Inquiries:**

Sharon Powell  
For CTE  
[Sharon@allisonpr.com](mailto:Sharon@allisonpr.com)  
404.713.2317

Tom Biro  
For CTE  
[Tom@allisonpr.com](mailto:Tom@allisonpr.com)  
206.414.8599

Joanna Morton  
BC Transit  
[Joanna\\_Morton@bctransit.com](mailto:Joanna_Morton@bctransit.com)  
250.995.5720