

Country Update CANADA



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12th Steering Committee Meeting December 2, 2009, Washington, DC



Hydrogen Infrastructure Demonstrations





British Columbia Hydrogen Highway

Examples of Activities:

- 7 Hydrogen Fueling Stations:
 - Vancouver, Surrey, North Vancouver, Port Coquitlam, Victoria, Vancouver Airport, Whistler
- Integrated Waste Hydrogen Utilization Project
 - Hydrogen and H2 CNG Fuelling Stations
 - 4 Hydrogen CNG buses
 - 8 Pick-up trucks (H2 ICE)
 - Fuel cell-powered car wash
- Activities at Vancouver International Airport include fueling station, hydrogen-powered airport baggage tugs, utility vehicles and shuttle buses.
- Photovoltaic panels, electrolyser and hydrogen storage at the NRC Institute for Fuel Cell Innovation
- Hydrogen Technology Environmental Chamber
- Integration with Vancouver Fuel Cell Vehicle Program







Vancouver Fuel Cell Vehicle Program





- Partnership between Government and Industry
- Demonstration of sustainable, zero-emission based transportation technologies
- 5 Ford Focus vehicles to be evaluated for three years in Vancouver's Lower Mainland
- Technology: Ballard Fuel Cell Systems, Dynetek Hydrogen storage
- Opportunity to test, demonstrate, deploy and evaluate proprietary systems for H2 production



Deployment of hydrogen fuel cell buses

Canada will be home to the world's largest deployment of hydrogen fuel cell buses

- 20 hybrid fuel cell buses in regular transit service by 2009 in Whistler
- Sixth generation of fuel cell bus technology. Fifth generation was tested in Europe from 2002-2005 using Canadian technology.
- 62% reduction in GHG emissions compared to diesel buses
- Largest H2 fuelling station in the world (1000 kg/day capacity)



Project features Canadian technology and expertise from:

Air Liquide Canada
Ballard Power Systems
Dynetek Industries
Hydrogenics Corporation
New Flyer
Questair Technologies
Sacre-Davey Engineering



Hydrogen Highway's H2i Campaign

Campaign to promote the sector during 2010 Olympics





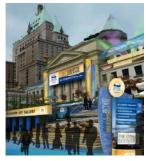


- The H₂i campaign will increase awareness of hydrogen fuel cells as a viable energy solution and support the sustainability pillar of the 2010 Olympic Winter Games.
- Official 2010 Olympic partners including Government of Canada, Government of BC, General Motors, Vancouver International Airport, BC Hydro awarded VANOC Sustainability Star for their involvement in the BC Hydrogen Highway.
- During the Olympics, a series of demonstrations will include hydrogen fueling and deployments of hydrogen and fuel cell cars, trucks, transit buses, forklifts, airport tuggers, and stationary products.



Hydrogen Highway's H2i Campaign







- H2i campaign working to place hydrogen and fuel cell technology in high-profile locations during Games time including BC Media Centre and "live" sites (BC, Canada Pavilions).
- Comprehensive communications plan includes media outreach, website (<u>www.poweringnow.ca</u>), social media, video, advertising
- Business-to-business opportunities for local hydrogen and fuel cell companies and organizations with incoming international delegations



Thank you