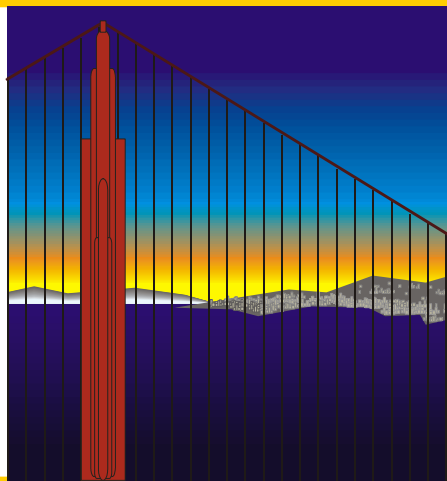




*The View From North of the
Border: The Canadian
Perspective on the NGV Market*



**23rd National NGV Conference
October 5-6, 2005
San Francisco, CA**

**Gerry MacDonald
Vice Chair, CNGVA**

Canada NGV Industry

\$300 million plus industry serving the world's NGV markets includes:

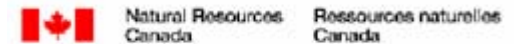
- Manufacturers
- Distributors
- Research and Developers



Canadian Natural Gas Vehicle Alliance (CNGVA)

- Canada was a pioneer of NGVs in 1980's
- Organization originally part of ONGA & CGA
- CNGVA created in 1994
- Represents interests of NGV industry
- Members include: gas utilities, manufacturers, suppliers, infrastructure operators & R&D groups
- Diverse interests

Canada CNGVA Members



Canada NGV Hot Spots

- In Canada 21,000 vehicles fill at 89 public stations, 100 private stations and 3,000 FuelMaker refueling systems
- The majority of stations are located in southern Ontario, the lower mainland of British Columbia and the Edmonton-Calgary Corridor in Alberta.



Canada Government Support Needed to Expand the NGV Market

- Environmental benefits alone cannot stimulate the growth
- Price differential between gasoline/diesel and natural gas is not compelling
- Economic incentives such as: favorable fuel taxation, and government grants and subsidies needed
- Effective government requirements for use of alternative fuels would be helpful



Canadian Government Policy Objectives

- Climate Change: reduced greenhouse gas emissions
- Healthy Environment: cleaner air quality
- Competitive Industry: Canadian firms are world leaders
- Automotive Industry Growth: expand manufacturing base
- Cities Agenda: infrastructure renewal (transit)
- Potential Next Economy: pathway to hydrogen

Canada

Government Programs

- Canadian Kyoto Implementation Plan
 - 2003 Change Action Plan (\$2B)
 - 146 Programs in place including \$9.9M NGV program
 - All currently under review
 - 2005 Climate Change Fund (\$4-5 B)
 - To buy offset credits to retire Canada's Kyoto commitments
 - 2005 Partnership Fund (\$2-3B)
 - Investment with Provinces for major GHG reduction
 - Technology Investment Fund
 - Starts in 2008
 - Technology investment to reduce GHG
- Other Federal, Provincial, Municipal Programs
 - Sales tax / Gasoline Tax rebate
 - Transit funding

Canada Specific Government Support

- \$9.9 million, interim step to a broader program
 - **\$3,000 per vehicle**
 - **Launch**
 - OEMs – March 2004
 - Conversions – Dec. 2004
 - **Covers selected cars, trucks and vans**
- Industry working with government to develop longer term and larger support program



Canada

Advanced Natural Gas Vehicle (ANGV)

- Dedicated & bi-fuel Light Duty vehicles
- Environment Canada tested and U.S. EPA certified
- Qualify for \$3000 incentive
- Installed by authorized conversion shops
- The main targets are:
 - On road: Taxis, Courier, Delivery and Shuttle Buses
 - Off road: Forklifts, Airports



Canada Transit Victory

TransLink's Recent Decision



- On July 20, the Board of Directors of the Greater Vancouver Transportation Authority made a decision to purchase approx. 100 NG buses over diesel
- CE able to offer TransLink a very attractive fuel price for CNG, as well as a bundled financing package that included funding for bus NG increment as well as fixed price

Canada Forklift Market

- Over 100 companies using natural gas representing more than 1500 Forklifts
- Customer benefits include:
 - Emissions Reduction
 - Injury Reduction
 - Safest Fossil Fuel
 - Forklift Performance Benefits
 - Convenient Refueling
 - Economic Benefits
- Market continues to grow



Canada Ice Arena Market

- Over 325 ice arenas using natural gas representing 25% of target market
- Over 30% of all new ice resurfacers are natural gas powered
- Market growth continues



Canada

Emerging Heavy Duty Truck Market

- Westport Innovations leading the way, the Heavy Duty Truck market is an emerging opportunity.
- Hwy 401 Heavy Duty Truck Demonstration using Westport natural gas engine technology and LNG refueling.



CNGVA in 2006

- Focus and strengthen industry
- Encourage Canadian Governments to adopt similar measures found in United States & Europe
- Seek continuation of the light duty incentive program
- Work with CVEF/NGVC to resolve OBD II challenge
- Leverage recent Vancouver CNG transit bus victory
- Pursue medium / heavy duty market
- Work with industry stakeholders to get OEMs into market
- Consider NGV/HCNG/hydrogen initiatives
- Work with international NGV community to build the NGV market

Thank you

For more information please contact:

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www.ngvcanada.org (under reconstruction)