



# North Atlantic Transportation Planning Officials Conference

**Changing Transportation Behaviour to  
Achieve Sustainability**

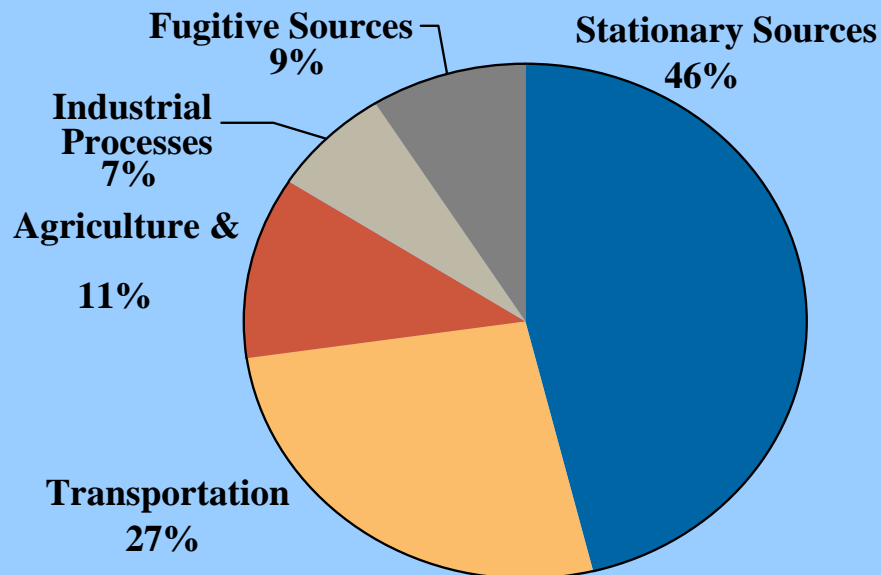
August 12, 2008

Niagara-on-the-Lake

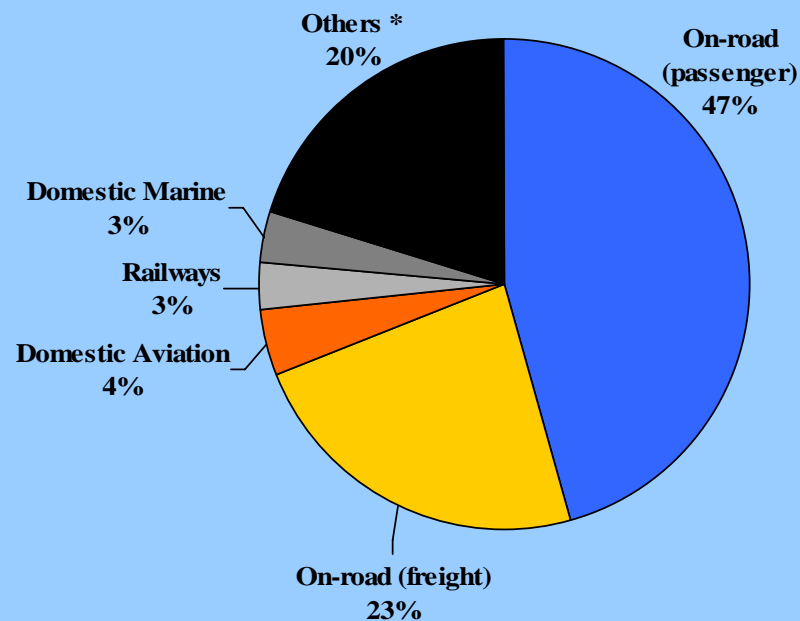




# Context – Transport Contribution to GHG Emissions in Canada



Total GHG emissions: 747 Mt in 2005



Transport Sector Emissions: 200 Mt in 2005



Source: *Canada's Greenhouse Gas Inventory, 1990–2005, Environment Canada*  
\* Others = off road diesel, off road gasoline and pipelines



# Transportation & Environment: *Challenges*

- Canada's transportation system is major enabler of economic activity – important in its own right and as a mover of people and goods
- Critical to Canada's well-being and competitiveness
- However, transportation activity carries significant environmental costs which must be addressed in strategic manner, notably:
  - Climate change
  - Air pollution
  - Impacts on land use and water quality





# Transportation & Environment: *Challenges*

- Transportation-related emissions account for over slightly over 25% of Canada's total greenhouse gas (GHG) emissions
  - These emissions are growing fast and will continue to rise.
- Transportation activity is linked to approximately 59% of carbon monoxide, 53% of nitrogen oxide, and 30% of volatile organic compound emissions in Canada
  - These emissions pollute the air, cause smog and have health related impacts.
- Reducing emissions best achieved through measures that integrate economic, social and environmental goals





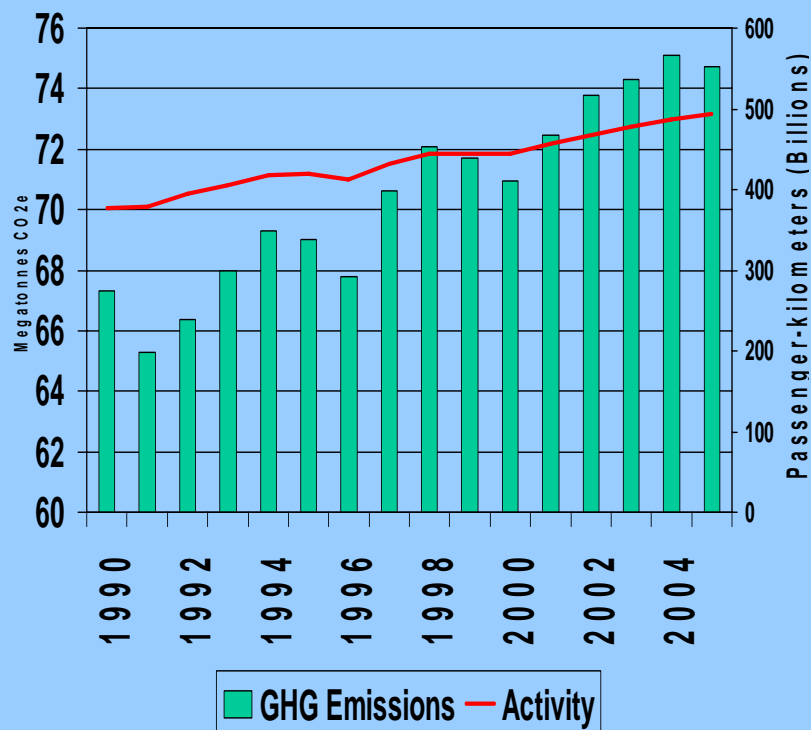
# Transportation & Environment: *Challenges*

- On-road emissions account for about three quarters of total transportation-related GHG emissions, of which passenger travel accounts for about one-half
- Freight movement is expected to increase by 60% between 1990 and 2020, with the largest growth in the aviation and trucking sectors
- This increase is primarily the result of economic growth and increased trade





## Passenger Vehicles GHG Emissions & Activity Trends - 1990 to 2005



- Need to Reduce Passenger Vehicle Emissions
  - Need to offer alternatives
  - Need to change behavior of people
  - Need to improve efficiency of vehicles
  - Need new technologies to shift from fossil fuels

Source: NRCan, Office of Energy Efficiency





# The GoC's Environmental Agenda

- Regulatory Framework for Air Emissions (first released in April 2007, with additional details announced in March 2008)
- Incorporates:
  - short, medium and long term emission targets for GHG emissions
  - fixed sectoral industrial emissions caps for air pollutants
  - regulations to ensure that air emission targets are achieved
  - compliance mechanisms





# Clean Air Regulatory Agenda

- The Clean Air Regulatory Agenda sets out the Government of Canada's comprehensive plan for regulating emissions from various sources. This includes new provisions for regulating automobiles, railways and commercial and consumer products.
- The Government intends to regulate the fuel consumption of road motor vehicles. Regulations will take effect for the 2011 model year, following the expiry of the Memorandum of Understanding between the auto industry and the Government of Canada.





# ecoTRANSPORT Strategy

- Announced in February and in March 2007 Budget
- Program measures to complement regulatory agenda
- Protects health and environment and develops new technologies
- Promotes behavioral and technological change
- Addresses both supply and demand
- Cuts across all modes





# ecoTRANSPORT Strategy

- Several programs managed by Transport Canada
  - ecoAUTO Rebate Program
  - ecoTECHNOLOGY for Vehicles Program
  - ecoMOBILITY Initiative
  - ecoFREIGHT Program





# ecoAUTO Rebate Program

- Current 2006, 2007 and 2008 models qualifying for rebate include:
  - Hybrid electric vehicles
  - Conventional fuel efficient vehicles
  - Most efficient E-85 flex fuel vehicles
- Eligible new vehicle purchases or leases as of March 20, 2007
- List of eligible vehicles is available on TC website





# ecoTECHNOLOGY for Vehicles Program

- The ecoTECHNOLOGY for Vehicles Program involves purchasing and testing a range of advanced technologies and showcasing them at public events across Canada
- Program includes in-depth testing and publishing of the safety and environmental performance of a range of emerging technologies for use in light-duty vehicles
- Also working in cooperation with the auto industry to identify and remove barriers to the introduction of advanced technology vehicles in Canada





# ecoMOBILITY Initiative

- The ecoMOBILITY Program aims to reduce urban passenger transportation emissions by helping municipalities shift more personal trips to sustainable modes
- Two components:
  - Contributions to municipalities to help them implement Transportation Demand Management (TDM) projects
  - Capacity Building to help municipalities develop the knowledge and tools to implement TDM





# ecoFREIGHT Program

- The ecoFREIGHT program is aimed at reducing the environmental and health effects of freight transportation through the use of technology
- Programs consist of six initiatives:
  - National Harmonization Initiative for the Trucking Industry
  - Freight Technology Demonstration Fund
  - Freight Technology Incentives Program
  - ecoFreight Partnership
  - Marine Shore Power
  - ecoEnergy for Fleets





# Other Clean Air Programs

- Moving On Sustainable Transportation (MOST) Program
- Urban Transportation Showcase Program (UTSP)





# MOST Program

- The Moving on Sustainable Transportation (MOST) initiative is an innovative funding program that provides financial assistance to organizations in support of projects that will help make sustainable transportation a reality in Canada
- The program aims to achieve quantifiable results by providing Canadians with practical information and tools to incorporate sustainable transportation options into their daily lives
- More information: [www.tc.gc.ca/MOST](http://www.tc.gc.ca/MOST)





# UTSP

- The Urban Transportation Showcase Program (UTSP) is a five-year program created to demonstrate, evaluate and promote effective strategies to reduce GHG emissions from urban transportation
- Under the UTSP, eight Canadian municipalities have been selected to implement integrated transportation showcases that demonstrate innovative GHG reduction approaches
- The effects of these approaches are evaluated for other important policy objectives to help build healthy cities
- More information: <http://www.tc.gc.ca/UTSP>





# Sustainable Development Strategy (SDS)

- Fourth SDS tabled December 2006
- SDS focused on areas where the department can make significant contributions
  - 21 commitments
  - Focused on urban, freight and marine
  - Three theme-based expert workshops
  - Creation of SDS Fund
- More information: [www.tc.gc.ca/SDS](http://www.tc.gc.ca/SDS)





# Recent Developments

- As of June 26<sup>th</sup>, 2008 a new *Federal Sustainable Development Act* requires the government to create and implement a government-wide SDS
  - The Act also creates a Sustainable Development Advisory Council made up of representatives from the Aboriginal communities, business, labour, and the environmental movement to advise the government on its SDS
- As a result of this Act, departmental strategies are to be tabled within one year of tabling of the federal SDS





# Conclusions

- Changing transportation behaviour is a major challenge
- Need for both supply and demand side solutions
- ecoTRANSPORT and SD strategies are taking important steps

