CANADA

Case Study: Vehicles, Engines And Fuels

VEHICLES, ENGINES AND FUELS CASE STUDY

1. The problem or issue addressed: Vehicles, Engines and Fuels

Transportation is the largest source of air pollution in Canada. The use of engines to power vehicles and equipment and the combustion of transportation fuels have major impacts on the environment and health of Canadians. Air pollution is a serious health problem. Studies show that more than 5,900 premature deaths a year across Canada can be attributed to air pollution.

On February 19, 2001, Environment Minister David Anderson made public the details of a 10-year Federal Agenda for Cleaner Vehicles, Engines and Fuels, an integral part of the Government of Canada's Clean Air Strategy. The plan of action includes measures and actions on clean air that will produce health and environmental benefits for Canadians from coast to coast.

2. Name of the programme: Plan of Action: Vehicles, Engines and Fuels
3. Timeframe: 40 years Year started: 2001
4. Status: Ongoing ☐ Completed in year 2011

5. Main objectives:

Emissions Initiatives

Emissions from vehicles and engines depend upon vehicle/engine technology and the properties of fuels. In some case, vehicle emission control systems cannot operate properly without the right fuels. Therefore, fuel standards and vehicle/engine emission standards must be considered as an integrated system.

The Plan of Action sets out a plan to develop new Canadian emission standards for vehicles and engines, aligned with those of the United States Environmental Protection Agency. Regulations under the *Canadian Environmental Protection Act* and emissions control programs are being developed and implemented to reduce emissions from:

- Cars, vans, pick-up trucks and sports utility vehicles being phased in as of the 2004 model year;
- Large trucks and buses being phased in beginning with the 2004 model year;
- Off-road diesel vehicles and engines such as those used in the agricultural sector and by the construction industry;
- Gasoline utility engines such as those used in snowblowers, lawn mowers, chain saws; and

- Outboard marine engines and personal watercraft.

Clean Fuel Initiatives

Cleaner fuels reduce pollution. The Plan of Action contains several measures aimed at protecting the health and environment of Canadians by improving the quality of diesel fuel by:

- Reducing the level of sulphur by 2006 in on-road diesel fuel used by trucks and buses by aligning Canadian requirements with those in the United States;
- Establishing a new limit for sulphur in off-road diesel fuel; and
- Establishing a comprehensive database on diesel fuel quality in order to monitor fuel quality.

6. Lead institution: Environment Canada

7. Other implementation arrangements and stakeholders involved (public, private, NGOs, CBOs, international support, etc.):

Stakeholders Involved:
Industry and industry associations, non-government organizations through ongoing communications regarding the effective implementation of the Plan of Action on Cleaner Vehicles, Engines and Fuels.

8. The results achieved (if possible, please address the social, economic and environmental impacts of the programme):

The Plan of Action on Cleaner Vehicles, Engines and Fuels is a key component of the overall air quality improvements being realized in Canada. The combined Plan of Action's regulatory initiatives reduce automotive emissions by over 95%.