

Good Management practices



Greenhouse Gases and the Canadian Beef Cattle Industry

KYOTO protocol

Concern about the enhanced greenhouse effect on the environment has prompted international action to reduce emissions. A first agreement intended to stabilize emissions at 1990 levels by 2000 was signed in 1992 at the Earth Summit in Rio de Janeiro.

A more binding agreement was reached at Kyoto, Japan in 1997. This protocol was aimed at reducing emissions from participating countries to at least five per cent below 1990 levels by 2008 to 2012. This treaty will come into effect only when ratified by at least 55 countries representing 55 per cent of total greenhouse gas emissions from developed countries.

Kyoto Protocol

In the Kyoto Protocol, Canada agreed to reduce its emissions to 94 per cent of 1990 levels by 2008 to 2012. The Protocol aims to lower overall emissions from a group of six greenhouse gases by 2008 to 2012, calculated as an average over these five years. Cuts in the three most important gases carbon dioxide, methane, and nitrous oxide will be measured against a base year of 1990.

At Kyoto, developed countries agreed to reduce their combined emissions of greenhouse gases by 5.2 per

cent from 1990 levels. This target will be realized through national reductions of 8 per cent by Switzerland, Central and East European states, and the European Union; and reductions of 6 per cent by Canada, Hungary, Japan, and Poland. Russia, New Zealand, and Ukraine are to stabilize their emissions, while Norway may increase emissions by 1 per cent, Australia by up to 8 per cent, and Iceland by 10 per cent.

Canada's emission reduction level is approximately 26-30 per cent below current levels, since emissions have increased by at least 20 per cent since 1990. Canada's Kyoto commitment is to cut 240 million tonnes of greenhouse gas emissions by 2012.

The Protocol does not require governments to implement any specific policy, but rather provides a list of policies and measures that might help mitigate climate change and promote sustainable development. These include:



Agriculture and
Agri-Food Canada
Prairie Farm Rehabilitation
Administration

Agriculture et
Agroalimentaire Canada
Administration du rétablissement
agricole des Prairies



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- Enhancing energy efficiency;
- Promoting renewable energy, carbon sequestration and other environmentally friendly technologies;
- Protecting and enhancing greenhouse gas sinks;
- Promoting sustainable agriculture;
- Removing subsidies and other market imperfections for environmentally damaging activities;
- Encouraging reforms in relevant sectors to promote emission reductions;
- Tackling transport sector emissions; and
- Controlling methane emissions through recovery and use in waste management.

If Canada does nothing to reduce greenhouse gas emissions, it is predicted that by 2010, emissions in Canada will be 33 percent higher than they were in 1990.

Accordingly emissions from transportation would be up 40 per cent, electricity generation 38 percent, and emissions from oil and gas production would be up 43 per cent.

How Canada will meet its commitment

Canada intends to achieve the majority of its GHG reductions through actions taken domestically. The government of Canada is investing \$500 million in Action Plan 2000. This investment, along with \$625

million over five years announced in Budget 2000, results in a total commitment of \$1.1 billion to address climate change over the next five years, and builds on the \$850 million that the Government of Canada spent during the previous five years.

Kyoto Mechanisms

The Kyoto Protocol includes three market-based mechanisms designed to help industrialized countries achieve their Kyoto targets at the lowest possible cost, and help promote emissions reductions and sinks projects.

- **Clean Development Mechanism**

(CDM) is a way to earn credits by investing in emission reduction projects in developing countries.

- **Joint Implementation**

(JI) is a way to earn credits by investing in emission reduction projects in developed countries that have taken on a Kyoto target.

- **International Emissions Trading**

(EIT) will permit developed countries that have taken on a Kyoto target to buy and sell credits among themselves.