

Defining the Role of Forests within Climate Change

Over the past 100 years, average temperatures have been increasing, and according to the latest report by the Intergovernmental Panel on Climate Change, the earth's climate will likely continue to warm considerably over the next 100 years. The greatest impacts of warming temperatures are expected at the northern latitudes. Forests play an important role in climate change by recycling the earth's carbon. Changes in temperature and moisture are major factors determining the growth and productivity of forests, the range of tree species, and the range and frequency of fires, insects, and diseases.

Canada is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), which was adopted in 1992 at the Earth Summit. Its ultimate objective is "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".

In 1995, Canada took steps to mitigate human causes of global warming by preparing the National Action Program on Climate Change (NAPCC), which encourages all sectors to explore cost-effective actions to limit the emissions of gases that trap heat in the atmosphere. The forest sector, for example, has reduced its greenhouse gas emissions by adopting energy-efficient processes and shifting to less carbon-intensive fuels.

The NAPCC also encourages research and development on climate change issues. To date, Canada's forest scientists have participated in research with the international community in reviewing and assessing knowledge regarding biomass burning, the global carbon cycle, and the socioeconomic impacts of climate change on forestry.

In December 1997, the Parties to the UNFCCC adopted a protocol to the Convention on Climate Change (the Kyoto Protocol) to limit emissions of six greenhouse gases.

In February 1998, subsequent to the Kyoto Protocol, the Government of Canada allocated \$50 million per year for the next three years to help lay a strong foundation for early action on climate change. Among the 16 committees, or tables, established as part of this process are the Forest Sector Table and the Sinks Table. The Forest Sector Table is made up of sector experts from the forest industries, environmental groups, labour groups, research organizations, academia, Aboriginal groups, and forest-dependent communities, as well as governments. The Forest Sector Table examined the potential for the forest sector to help reduce Canada's greenhouse gas emissions through fuel switching and energy efficiency.

The Sinks Table included experts from forest, agricultural, and wetland carbon sinks and sources. In conjunction with the Forest Sector Table, it looked at ways to enhance forest carbon sinks and reduce forest carbon sources that are associated with forest-related activities included in the protocol. A series of options were recommended by the tables in their options reports. These options are being reviewed by federal, provincial, and territorial governments for inclusion in Canada's National Implementation Strategy. Work on the strategy will continue throughout 2000.

Virtual Information – Canada's Forest Network

Canada's Forest Network (<http://www.forest.ca>) is an Internet guide to help Canadians as well as the worldwide Internet community access Canadian forest and forestry-related Web sites and Internet resources. Containing hundreds of site descriptions and links, as well as e-mail addresses, the network is a valuable source for finding Canadian forest products, services, organizations, events, issues, statistics, and publications.

Training for the Future

In July 1998, the Sustainable Forest Management–Network of Centres of Excellence (SFM-NCE) was renewed to 2002 with \$9 million in funding. Research and training are the main focus of the NCE, which is located at the University of Alberta. The research is directed toward improving Canada's forest-based economy through the development of knowledge, strategies, and technologies for the management and conservation of boreal forests. The interdisciplinary program gives students exposure to activities outside their strict academic discipline, which last year benefitted more than 200 students in the program.