

### **“A glimpse of Bioenergy Activities in Canada”**

Canada is beginning to realize some of its biological potentials in the field of bioenergy as it inventories the resource, studies and tests new varieties, begins to plant on a commercial scale and introduces the issue of biomass and bioenergy before the public.

The Canadian Forest Service is in the process of developing inventory methods for our biomass resources to be able to assess biomass over time and to enable planning for harvesting as a crop or in conjunction with conventional harvesting operations. An improved knowledge of biomass resources will enhance the ability of forest-based communities to make the best use of biomass for energy. Knowledge of biomass resources is needed for reporting on Criteria and Indicators in international agreements; biomass volumes are an indicator of forest productivity and form part of carbon budget models used in Kyoto negotiations.

A research initiative on poplar genomics has recently been promoted with a view of developing new varieties for a range of purposes in the commercial sector. The initiative is part of a larger research effort to explore the Canadian biosphere to address the issues of climate change and greenhouse gas management to reduce emissions at source, remove them from the atmosphere and reduce demand on fossil fuels through the use of bio-based energy.

Biomass plantings for testing and operational scales are in place various places in Canada. In Quebec, testing of poplars on disused farmland and with fertilization by solid wastes is underway and is demonstrating establishment and tending methods for poplar and willow. In Ontario, review of older plantings which tested growth and development of many varieties of poplar, willow and alder under various planting/fertilization methods. In western Canada on the Prairies, evaluation is underway of older plantings of poplars, species and hybrids, may planted 30+ years ago. At the same time the testing of new species and varieties under a range of establishment methods continues.

In Alberta, in recent years industrial scale planting of poplars on farmland in collaboration with landowners has occurred. These plantings are for fibre to address perceived shortages in the next 20 years. In British Columbia large-scale establishment of *Populus trichocarpa* by industry is aimed at similar goals.

In November 2002, the *Canadian Biomass Energy Association* (CANBIO) was incorporated to promote the use of biomass for energy in Canada. The organization is currently conducting a membership drive, developing its communications strategy, and is planning a national meeting with a workshop in early 2003. CANBIO thus joins the family of biomass associations, FINBIO, SVEBIO etc.