



Beyond Moose and Mountains: Ontario's Bio-Economy

Because growing our economy, and growing stronger, requires that Ontario be open to change, open to opportunities, open to our new world.

- Speech from the Throne 2010.

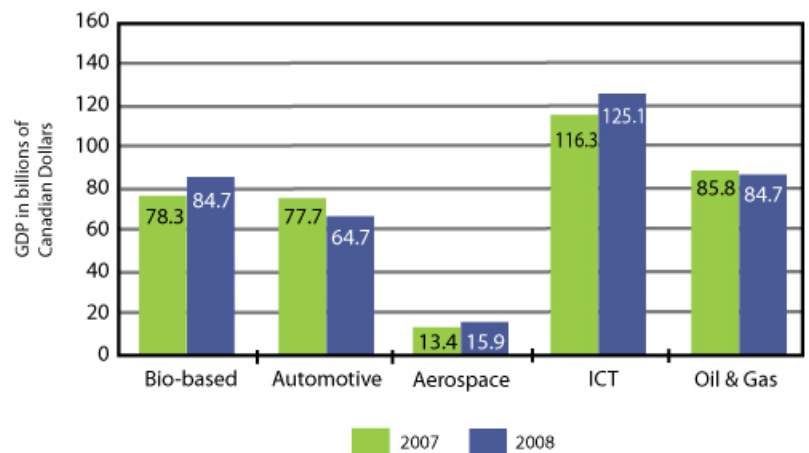
What is the bio-economy?

Canada's bio-economy is worth \$80 billion or more than 6.4 per cent of our GDP and supports an employment network of more than 1 million jobs.

The bio-economy applies biotechnology processes, products and tools to manufacturing, automotive, health, energy and agriculture to create new methods of manufacturing and developing consumer products and services.

Car seat foam made from soybeans, new vaccines, bio-diesel and engine oils made from oilseed crops, biological therapies for Alzheimer's and cancer, ethanol (1 million litres per day) new plastic composites from agricultural sources, trans fat-free cooking oil, renewable biomass energy sources — all showcase the vast range of applications biotechnology can offer our daily life.

International economists believe the bio-economy is currently responsible for as much as one-third of the global economy. In the future, according to the OECD, the bio-economy will contribute 10-14 new drugs per year over the next 5 years, and will be responsible for 10 % of chemical production by 2030.

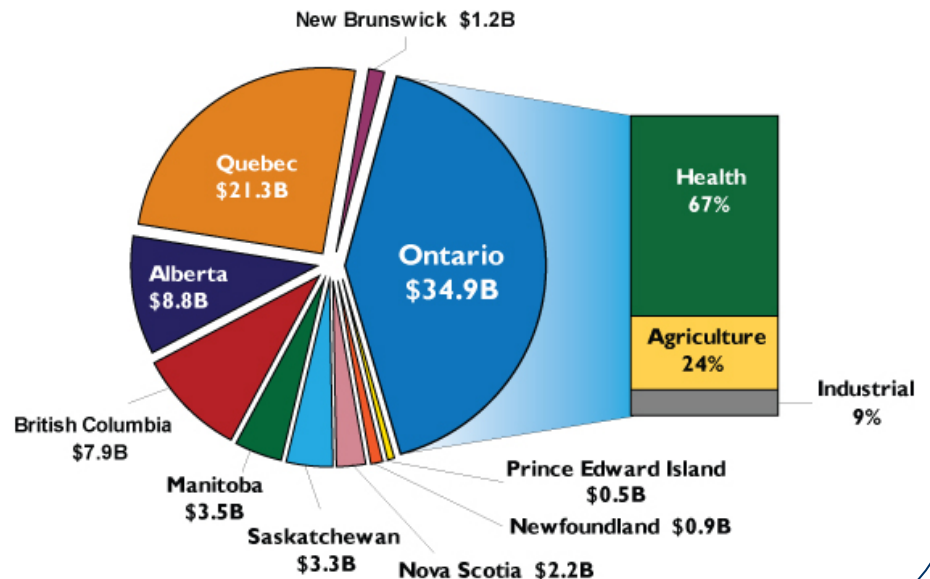


Ontario's bio-economy by the numbers:

26 % of Canada's biotech sector is concentrated in Ontario. Ontario's bio-economy contributes

\$34 billion to Canada's GDP, and is responsible for

41.3 % of the national bio-economy (2008).





How can we realize the potential of Ontario's bio-economy? Let's build it here!

Ontario's Green Energy commitments and Open Ontario plan places the province on the forefront of public policy leadership in building the bio-economy.

The drivers of the bio-economy — people, capital, and operating environment — can help us create a dynamic new economic base consistent with Ontario's 5 year *Open Ontario plan*.

People: develop, attract and retain world-class talent in both biotechnology research and the commercialization of innovation

Capital: stimulate new capital formation, achieve world-leading efficiency in the use of capital, and create the most bio-friendly tax regime in the world

Operating Environment: align all government policies, regulations and research and commercialization efforts to capture the full potential of innovation

The Open Ontario Plan aims to create “a climate where business can thrive, create jobs and build innovative new products to sell to the world”¹ creating a business environment geared for success in Ontario must include:

Health Biotechnology: Ontario's health biotechnology industry relies on both continued investment in cutting-edge, early-stage health biotechnology research and a receptive environment for the introduction of health innovations. Policies such as investments in the rapid adoption of new therapies and a patient-safety-centred approach to Subsequent-Entry Biologics will ensure a healthy, productive population and a robust environment for investment in Ontario health technology development.

Vaccines: Vaccines remain the most cost-effective medical intervention and Ontario has long been a global leader in the development of new vaccine technologies. As new vaccines continue to be developed and introduced in Canada, Ontario has the opportunity to take a leadership position in the development of a truly national immunization system that quickly and efficiently adopts new immunization programs.

Agricultural Biotechnology: Biotechnology increases agricultural productivity, reduces environmental impact and provides Ontario farmers with greater income diversity. New crops designed for biomass production and new, more nutritious corn and soybean varieties all require a federal and provincial regulatory environment that allows farmers to grow them and industries as diverse as cement to food processing to use them in the production of improved consumer products.

Industrial Biotechnology: Ontario can realize investment in the development of a “green chemistry” industry similar to “green energy.” The market for biomass-derived chemicals and materials continues to grow exponentially. Ontario has both the chemical manufacturing capacity and industries that can benefit from these bio-based innovations. Procurement incentives as well as continued investment in research hubs and demonstration plants can make Ontario a bio-industrial leader.

¹ Speech from the Throne. March 2010