

News Release

Canadian Science and Technology is Healthy and Growing, says Expert Panel

For Immediate Release

Ottawa (September 27th, 2012) - An authoritative, evidence-based assessment of the state of science and technology in Canada has found that Canadian science and technology is healthy and growing in both output and impact. Over the past five years, real improvements have occurred in the magnitude and quality of Canadian science and technology.

A newly released report by the Council of Canadian Academies entitled, *The State of Science and Technology in Canada, 2012* provides a thorough analysis of the scientific disciplines and technological applications where Canada excels in a global context. In 2010, Industry Canada via the Minister of Industry, asked the Council of Canadian Academies to assess the state of science and technology in Canada and to consider all fields in which research is conducted As such, the Council assembled an 18-member expert panel from Canada and around the world to conduct this in-depth assessment. In particular, the panel focused on research performed in the higher education sector, as well as in the not-for-profit and government sectors.

"There is much for Canadians to be proud of as Canada's international reputation is strong, science and technology research is robust across the country, and globally we are considered to have world-leading research infrastructure and programs," said Panel Chair Dr. Eliot Phillipson. "The Panel's findings are comprehensive and represent one of the most in-depth examinations of Canadian science and technology ever undertaken."

Key findings within the report include:

- The six research fields in which Canada excels are: clinical medicine, historical studies, information and communication technologies (ICT), physics and astronomy, psychology and cognitive sciences, and visual and performing arts.
- Canadian science and technology is healthy and growing in both output and impact. With less than 0.5 per cent of the world's population, Canada produces 4.1 per cent of the world's research papers and nearly 5 per cent of the world's most frequently cited papers.
- In a survey of over 5,000 leading international scientists, Canada's scientific research enterprise was ranked fourth highest in the world, after the United States, United Kingdom, and Germany.
- Canada is part of a network of international science and technology collaboration that includes the most scientifically advanced countries in the world. Canada is also attracting high-quality researchers from abroad, such that over the past decade there has been a net migration of researchers into the country.

- Ontario, Quebec, British Columbia and Alberta are the powerhouses of Canadian science and technology, together accounting for 97 per cent of total Canadian output in terms of research papers. These provinces also have the best performance in patent-related measures and the highest per capita numbers of doctoral students, accounting for more than 90 per cent of doctoral graduates in Canada in 2009.
- Several fields of specialization were identified in other provinces, such as: agriculture, fisheries, and forestry in Prince Edward Island and Manitoba; historical studies in New Brunswick; biology in Saskatchewan; as well as earth and environmental sciences in Newfoundland and Labrador and Nova Scotia.

Elizabeth Dowdeswell, President of the Council of Canadian Academies noted, "In 2006, the Council published its first report on the state of science and technology in Canada. It provided a solid evidence base from which policy decisions could be made." She added, "The Council's 2012 report builds upon, updates, and expands on the 2006 assessment. The current Expert Panel used a suite of complementary measures to capture information about different aspects of the Canadian research system. As a result, this report provides considerable data for further exploring and understanding Canadian strengths, trends, and emerging areas of science and technology."

The Panel's mandate excluded an examination of science and technology performed in the private sector, as this area is being assessed by the Council's Expert Panel on the State of Industrial Research and Development. Combined these two reports will provide a comprehensive overview of Canada's science and technology enterprise.

To view the full report and media primers, visit the links below:

- The State of Science and Technology in Canada, 2012 (full report)
- Media Primers
 - o Canada on the Global Stage
 - o Science and Technology across Canada
 - o Understanding the Expert Panel's Methodology

-30-

About the Council of Canadian Academies

The Council of Canadian Academies is an independent, not-for-profit organization that began operation in 2005. The Council supports evidence-based, expert assessments to inform public policy development in Canada. Assessments are conducted by independent, multidisciplinary panels of experts from across Canada and abroad. The Council's blue-ribbon panels serve free of charge and many are Fellows of the Council's Member Academies: the Royal Society of Canada; the Canadian Academy of Engineering; and the Canadian Academy of Health Sciences. The Council's vision is to be Canada's trusted voice for science in the public interest. For more information visit: www.scienceadvice.ca

For more information please contact:

Cate Meechan Director, Communications Council of Canadian Academies Cell: 613.302.6174 / Office: 613.567.5000 x 228 cathleen.meechan@scienceadvice.ca