Industry Canada Industrie Canada

Canada

Science and Technology Data - 2011

www.science.gc.ca

National

April 2013

Science and Technology Data is published yearly by Industry Canada's Science and Innovation Sector. This publication presents a snapshot of the state of science and technology in Canada in an accessible and convenient format.

This year, the format has been changed to five two-page documents. "National" provides a summary of Canada's R&D. "Government," "Industry" and "Higher Education" each cover a specific component in the national S&T system. "Canada & the World" describes links between Canada's S&T activities and those in other countries around the world.

Due to the varied approaches to national collection and multilateral compilation of data, the figures used for international comparisons will often be for earlier periods than those used for domestic trends. All figures are based on the most recent, reliable data.

GERD represents the total R&D performed in a country. In Canada, as in most other OECD countries, the business sector is the single largest funder of GERD. In 2011, 45 percent of the total Canadian R&D was funded by the business sector.

The ratio of GERD over GDP is a standard indicator of the national effort on R&D. In 2010, Canada's GERD intensity stood at 1.8 percent and was ranked 17th among OECD countries.

The composition of GERD differs across OECD countries. While Canada's business sector performed 50 percent of GERD—low compared to the 66 percent share witnessed for the OECD as a whole—its higher education sector accounted for 38 percent of GERD, twice the 19 percent share found across the OECD.

In 2010, Canada had 8.6 researchers per thousand total employment. On this metric, Canada ranks 12th among OECD countries (4th in the G7).

Acronyms and Abbreviations

BERD	Business enterprise expenditure on research and development
GDP	Gross domestic product
GERD	Gross domestic expenditure on research and development
GOVERD	Government intramural expenditure on research and development
HERD	Higher education expenditure on research and development
OECD	Organisation for Economic Co-operation and Development
PNP	Private Not-for-Profit

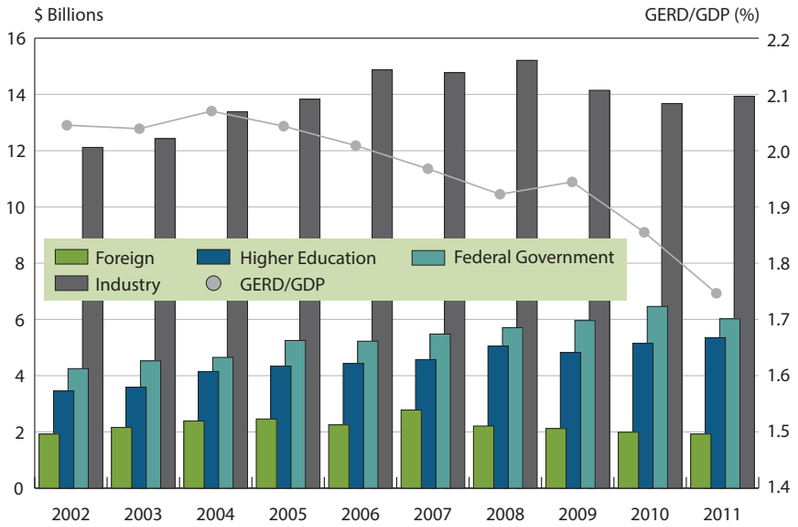
Definitions

R&D "Research and development" is creative work undertaken on a systematic basis to increase the stock of knowledge, including knowledge of humankind, culture and society, and the use of this stock of knowledge to devise new applications.

RSAs "Related scientific activities" complement and extend R&D by contributing to the generation, dissemination and application of scientific and technological knowledge.

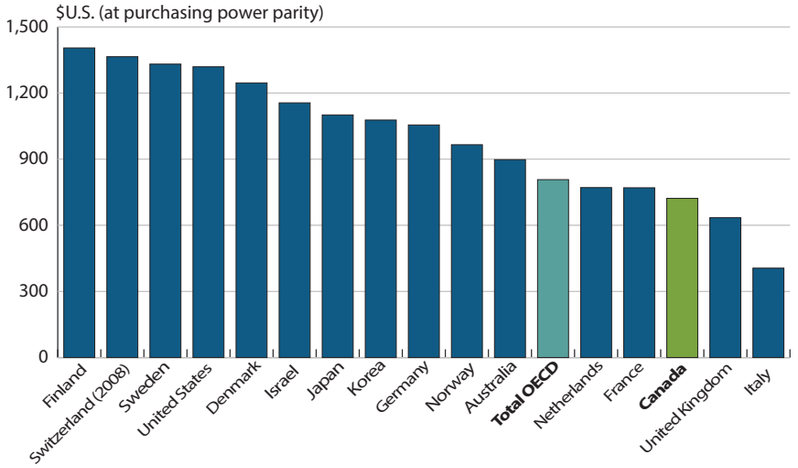
S&T "Science and technology" includes both R&D and RSAs.

Canada's GERD by Major Source of Funds, 2002 to 2011



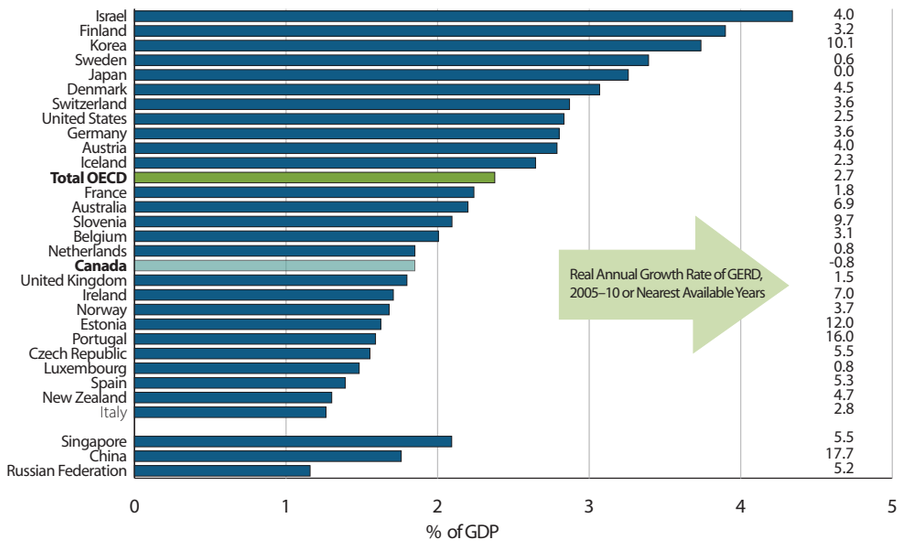
Source: Statistics Canada, *Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces*, Catalogue no. 88-221-X, December 2012.

Gross Domestic Expenditures on Research and Development per Capita, Selected OECD Countries, 2010



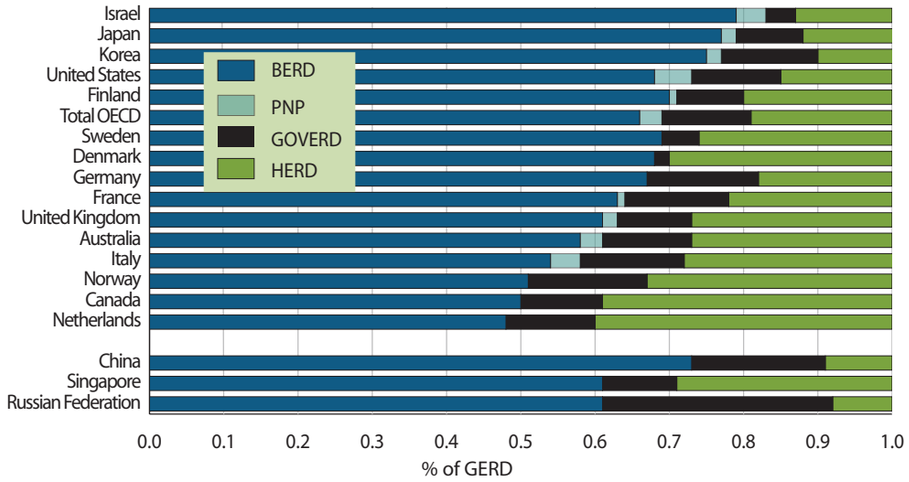
Source: OECD, *Main Science and Technology Indicators: 2012/2,* January 2013.

GERD as a Percentage of GDP, Top OECD and Selected Non-OECD Countries, 2010



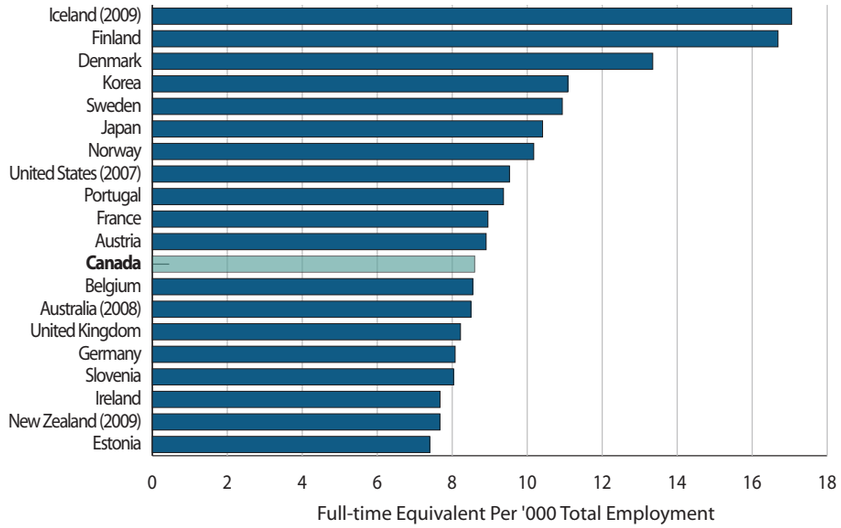
Source: OECD, *Main Science and Technology Indicators: 2012/2,* January 2013.

Distribution of R&D Expenditures by Performing Sector, Selected OECD and Non-OECD Countries, 2010



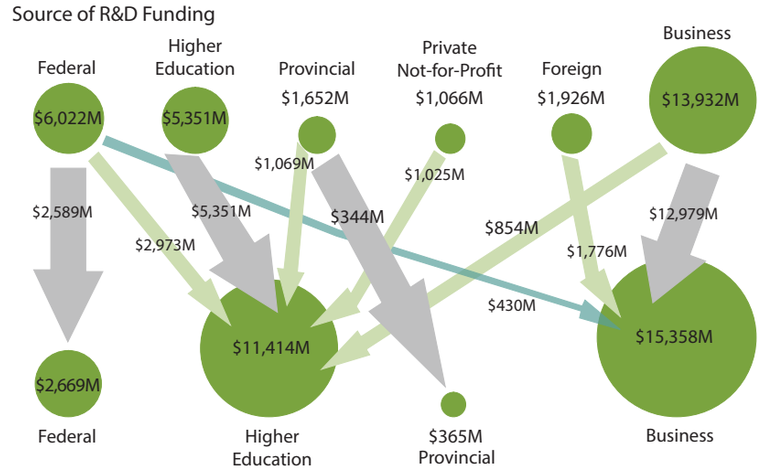
Source : OECD, *Main Science and Technology Indicators: 2012/2*, January 2013.

Total Researchers per Thousand Total Employment, 2010



Source: OECD, *Main Science and Technology Indicators: 2012/2,* January 2013.

Major Flows of Direct R&D Funding in Canada, 2011



Note: Only flows larger than $200M are shown in the chart.
Source: Statistics Canada, CANSIM Database, Matrix 358-0001.

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Cat. No. Iu1-5/1-2011E-PDF
ISSN 2291-4722

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