groundwater, soil salinization, microbiology, and solar and wind energy. The council also operates an oil sands information branch.

BC Research is a non-profit industrial research society with offices and laboratories in Vancouver, BC. Its activities enable even the smallest firms to improve their competitive position in Canadian and world markets by the use of up-to-date scientific knowledge. It is active in applied biology, chemistry, engineering — physics, ocean engineering, operations research, industrial engineering — and social impact and economic studies.

12.8 National expenditures on R&D

The federal government adopted the ratio of gross expenditures on R&D (GERD) to the gross national product (GNP) as an indicator of the level of R&D in Canada. In January 1981 the government announced an R&D planning framework which called for the country's R&D to reach 1.5% of GNP by 1985. The federal government share would be 0.5% of the GNP, while the target for industry would be 0.75% of the GNP with the balance funded by provincial governments, universities and other sources.

The ratio of GERD/GNP peaked at 1.29% in 1967 and declined until 1976 when it reached a value of 0.96%. The GERD/GNP ratio rose to a value of 1.29% again in 1982 but has subsequently declined to a projected value of 1.24% in 1984.

Preliminary data for 1984 indicated that Canada's gross expenditures on R&D would be about $5.3 billion. Of this amount 38% was to be funded by the federal government, 40% by industry and the remaining 22% by the provincial governments, universities and other sources.

The R&D planning framework called for an average R&D growth rate of 20% with the federal government growth in expenditures to be 17% and the growth in industry to be 27% during the period 1979-85. Preliminary 1984 data reveal that the overall actual growth rate was only 15%, with a federal rate of 16% and industrial, 15%.

Source

Science and Technology Division, Statistics Canada. Compiled by Dr. H.F. Waldron.

Selected references

Canadian science indicators. Statistics Canada 88-201 (annual), Ottawa.
Federal scientific activities, 1984/85. Statistics Canada 88-204 (annual), Ottawa.
A framework for measuring research and development expenditures in Canada. Statistics Canada 88-506, Ottawa.
Human resources for science and technology in Canada. Statistics Canada 88-508, Ottawa.
An indicator of excellence in Canadian science. Statistics Canada 88-501, Ottawa.
An indicator of excellence in Canadian science: summary report. Statistics Canada 88-507, Ottawa.
Industrial research and development statistics. Statistics Canada 88-202 (annual), Ottawa.
Patents as indicators of invention. Statistics Canada 88-504, Ottawa.
Productivity, science and technology. Statistics Canada 88-505, Ottawa.
Resources for research and development in Canada. Statistics Canada 88-203 (annual), Ottawa.
Service bulletins, Statistics Canada 88-001, Ottawa, as follows:
The investment tax credit for research and development, 1977 to 1981.
The additional allowance for scientific research, 1978 to 1981.
Research and development expenditures, 1984 forecast.
Industrial research and development expenditures, 1975 to 1984.
Regional distribution of R&D in Canada, 1977 to 1982.
Regional distribution of federal expenditures on science and technology, 1982-83.
Federal government expenditures on activities in the natural sciences, 1976-77 to 1984-85.
Federal government expenditures on activities in the social sciences, 1984-85.
Research and development in the petroleum industries, 1984.
Federal government personnel engaged in scientific activities, 1984-85.
The provincial research organizations, 1982.
R&D expenditures of the private non-profit organizations, 1982.
Technology and the balance of payments. Statistics Canada 88-502, Ottawa.
Technology and commodity trade. Statistics Canada 88-503, Ottawa.