

The growing importance of Canada's offshore natural resources, underlined by the government's declared policy on oceans in November 1973, has caused MOSST to become increasingly involved in policy development and implementation on ocean matters. In particular, the division has devoted attention to the government's goal of achieving world recognized excellence in operating on and below ice-covered waters.

The Program Review and Assessment Division interacts with departments on program planning, and provides advice to the Treasury Board Secretariat on requests by departments and agencies for financial and manpower resources. Criteria have been developed and advice provided on the decentralization of S&T facilities, transportation R&D, the impact of the Make-or-Buy policy on intramural scientific activities and the effect of cost increases on the budgets of the granting councils. An important part of the development of assessment methodology is the work under way to devise management tools such as price deflators for analysis of the differential impact of inflation among science based programs. The usefulness of "science indicators" to measure the condition of scientific activity in Canada is also being examined as a further aid to the management of science and technology resources.

The Industry Branch identifies the scientific and technological implications of policies and programs affecting the industrial sector and maintains an overview of various policies and programs in order to create a coordinated approach to R&D assistance and promotion. It examines and makes proposals for areas involving industrial R&D as well as science and technology which cut across departmental responsibility lines, or which are not within the particular province of other departments and agencies. The branch is also concerned with forecasting and assessing potential impact of scientific and technological advances upon Canadian society and environment.

The University Branch is responsible for advising the government on matters of general policy affecting federal support of university research and for continuing liaison between the government and the university community.

During 1975-76 there was extensive debate on the funding of university research. The branch participated in round-table discussions and at meetings sponsored by various organizations such as the Association of Universities and Colleges of Canada, the Royal Society and the Learned Societies. The debate served to clarify for the ministry the concerns of scientists and others associated with university research.

To inform the government a study of federal funding of university research was initiated. It was to consist of an analysis of federal contributions through the granting councils, federal contributions through other federal departments and agencies, and a comparison of federal and other sources of funds for sponsored research in universities.

R&D in industry

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Industry performs about 37% of all Canadian R&D which makes it the largest performing sector. This is 3% more than the combined total of provincial and federal governments and 8% more than the university and private non-profit sectors.

The Canadian industrial R&D effort, however, falls well behind most other industrialized countries when R&D expenditures are compared to an indicator of economic activity such as gross domestic product (GDP). In fact, the ratio of Canada's industrial R&D/GDP is only 25% to 40% of the ratios for the Federal Republic of Germany, Sweden, the US, France, Japan and the Netherlands.

Most industrial R&D is performed by a small number of firms. In recent years, the 25 leading performers have accounted for more than 50% of current intramural R&D expenditures; the first 200 performers spent approximately 88% of such expenditures.