

to establish their own laboratories or to develop products specifically for the Canadian market. However, Canadian industry in general is now greatly extending research facilities and becoming much more aware of the advantages to be gained therefrom.

There are no large profit-making research institutes in Canada although several laboratories are available to undertake consulting, testing and experimental work in technological and engineering fields. Nor are there many non-profit research institutes in operation. The Ontario Research Foundation is the largest of this type in Canada. It is a self-governing research institute that engages in research and development on contract for manufacturers, departments of government and on its own account. Although initially financed by an endowment fund subscribed partly from industry and partly from government, its current revenue is derived largely from sponsored research. The British Columbia Research Council operates in a similar manner. Co-operative research through research associations is likewise a minor factor in Canadian research activity. The Pulp and Paper Research Institute of Canada (see Forestry Chapter) is the only example of a major research association. This Institute's operating funds are provided by industry but, from the outset, the Institute has represented a co-operative partnership between the Federal Government, McGill University and the pulp and paper industry. For many years the Government provided a grant which was replaced in 1956 by the construction and equipping of a laboratory for the use of the Institute. The Federal Government now has under way, at a cost of \$3,000,000, an extension to these laboratory facilities to meet the increasing demands of the pulp and paper industry for more advanced and diversified research essential to the maintenance of its competitive position in world markets.

Thus, there are three main sectors of research in Canada—government research, university research and research in industry. These three elements are covered in some detail in the following Sections and Subsections.

**Mechanism for the Federal Science Policy.**—In the federal sphere, the ultimate authority for policy on science resides in the Cabinet. To exercise this authority there was established by the National Research Council Act (RSC 1952, c. 239, as amended) a Cabinet committee known as the Committee of the Privy Council on Scientific and Industrial Research. This Committee comprises those Cabinet Ministers having departments with scientific responsibilities and certain other Ministers who have an indirect concern with scientific affairs. These federal departments and agencies advise the Privy Council Committee on the scientific aspects of their own departmental responsibilities and on the organization and support of research required for their own purposes. The National Research Council, on the other hand, advises the Committee on general science policy, particularly on research in the universities, in industry and in fields not specifically the responsibility of the departments or agencies.

In 1949 the Privy Council Committee broadened the structure of its advisory mechanism by the addition of an advisory body of senior officials to which it might turn for joint advice on the formulation and conduct of government scientific policies. Thus the Committee has now two advisory bodies—the National Research Council and the Advisory Panel. The Council, being composed of non-government scientists representing the universities, industry and labour, is admirably suited to keep the Committee informed of the effect of government policy on the scientific activities of the country at large and to advise on the actions necessary to maintain the universities and independent research institutes in a healthy condition. The Panel, on the other hand, being composed of senior government officials, is the appropriate body to consider government policy affecting departmental activities and to advise the Committee on government action. The President of the National Research Council, as chairman of both bodies, provides for co-ordination and the proper division of responsibilities.

In 1964 Canada moved toward integration and stimulus of research with the creation of a Scientific Secretariat in the Office of the Prime Minister. The Secretariat was established as a result of the recommendations of the Royal Commission on Government Organization and those of Dr. C. J. Mackenzie, former President of the National Research