

own account, and derive their current revenue mainly from sponsored research. The Pulp and Paper Research Institute of Canada (see Forestry Chapter) is the one major research association that operates on a co-operative basis; its operating funds are provided by industry and its facilities by the Federal Government and McGill University, all three vitally interested in ensuring that this industry maintains its competitive position in world markets. However, through the years the primary resource base of industry generally was not conducive to the establishment of industrial research laboratories. Also, the prevalence of foreign-owned manufacturing companies exerted considerable influence on the development of industrial research. Canadian subsidiaries of foreign companies had ready access to the research and development results of their parent companies and Canadian companies had little incentive to establish their own laboratories or to develop products specifically for the Canadian market. But now, Canadian industry across the country is greatly extending research facilities and becoming much more aware of the advantages to be gained therefrom. To meet the challenge of competition from other countries in the manufacture of ultra-modern production, it is impressively stepping up its own scientific and technical studies. The Ontario Research Community at Sheridan Park in Metropolitan Toronto is a virtual breakthrough for Canadian industry. So is the research centre at Pointe Claire in Metropolitan Montreal. Such industrial research centres as these will ensure that Canadian industries remain competitive and, perhaps more important, will permit Canadian graduate students to find both challenge and creative opportunity at home. The value of buildings already built or under construction at Sheridan Park is \$27,000,000 and several sites are still available. Elsewhere in the country a number of new industrial research centres have been established, and others are in the planning stage, to conduct basic and applied research in a wide range of scientific disciplines.

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 major 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. For many years, the National Research Council, on the other hand, advised 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. Then, 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.

In 1964, a move was made toward integration and stimulus of research with the creation of a Science Secretariat in the Office of the Prime Minister. 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 Council, the Secretariat has the task of assembling, digesting and analysing information related to the Government's scientific and technological activities, including their interrelationships with university, industrial and provincial scientific establishments. In 1966, the Science Council of Canada was established, drawing its professional and administrative support from the Science Secretariat. Exclusively advisory, the Council will call for intensive studies of science and technology in Canada, serving as a focus for information and advice useful to the people of Canada in formulating policies and plans for the future. It will delineate