

Some expenditures of the federal Government for science and technology in 1983-84 in the resource industries are: the energy sector, \$385 million; agricultural research, \$288.2 million; oceans and fisheries, \$94.9 million; and natural resources, \$214.2 million. Most of these expenditures are mission-oriented research expenditures within the Departments themselves. The Department of Agriculture, for example, will be spending \$211 million on intramural research and development in 1983-84. Fisheries and Oceans will be spending \$158 million. Energy, Mines and Resources will be spending \$181 million, and the Canadian Forestry Service will be spending \$62 million. These latter expenditures do not take into account the incentives which the federal Government provides to universities and industry to encourage them to support science and technology in the resource sectors. Nor do they take into account the approximately \$200 million which the federal Government provides through tax incentives to encourage industry to invest in research and development.

Aside from these expenditures which are committed in the Main Estimates for 1983-84, further support to R and D in the resource sector has been provided under the Special Recovery Capital Projects program. This program, highlighted in the technology policy which was announced in the House of Commons on May 3, has allocated \$337 million to the accelerated construction or expansion of research and training facilities. These projects are expected to expand substantially research capabilities to serve the forestry, fisheries, agri-food, manufacturing and mining industries. Another \$15 million has been allocated to the construction of a fluid-bed minerals research centre in Chatham, New Brunswick. This project is expected to make a major contribution to Canadian mining technology.

Forestry research has received a major boost from this program. For instance, \$22 million has been provided for a Maritime forest research centre in Fredericton, New Brunswick; \$13 million, as I mentioned previously, has been provided to augment the Great Lakes Forest Research Laboratory in Sault Ste. Marie, and \$14 million has been provided to increase the forest research facilities at the Pacific Forest Research Centre in Victoria, British Columbia.

As part of the joint industry-Government plan to spur technological development and innovation to enhance our forests' potential, the program has provided \$2 million to expand the Pulp and Paper Research Institute of Canada's facilities at Pointe Claire, Quebec, and \$15 million to construct new facilities in Vancouver, British Columbia. In the fisheries sector, \$40 million is being provided to construct facilities for oceanographic and other fisheries related research at the Fisheries Research Centre in Mont Joli, Quebec.

In agriculture, \$30 million is being provided to fund the construction of facilities for food research at the integrated research centre in St. Hyacinthe, Quebec. The results achieved at this research centre will support the growth and diversification of the food industry throughout the country. Also, \$6 million is being provided to expand the NRC's prairie regional laboratory to house the western centre of the national biotech-

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nology program. Research undertaken here will be primarily focused on the application of biotechnology to the agricultural industry. As well, \$19 million will be provided as a contribution towards construction of the Atlantic Veterinary College in Charlottetown, Prince Edward Island. This is a total of \$186 million in support of research facilities to improve research and development in the resource sectors. This does not indicate that the resource industries are being ignored by the Government of Canada; rather, it is a strong indication of the importance the federal Government is placing on supporting our resource development industries.

It is easy to fall into the trap of thinking that technology development is only high-tech or microelectronics. One of the objectives of the technology policy is to dispel this myth and to emphasize the importance of technology to all sectors of our economy. The very first objective of the policy is to strengthen the Canadian economy through the development of new technologies for producing goods and services and the widespread adoption of new and existing technologies. Canada has not always had a good record on technology diffusion within our industries. A recent study by the Economic Council suggests that we lag considerably behind other countries in the adoption of new technologies, particularly in the non-central regions of Canada. Not only is R and D critical to keeping our resource industries competitive, but diffusion of the new and available technologies is particularly important to our continuing ability successfully to make the most of our rich resource base.

Because research in the resource sector is so heavily dependent on research undertaken in the federal laboratories, the federal Government is particularly concerned that the research in these labs is both effective and relevant to the industry it serves. With respect to the research and technology development performed or funded by the Government itself, the objectives of the technology policy are: to ensure that all federal programs and policies related to technology development contribute as effectively as possible to the over-all federal objectives for technology and economic development; to ensure that the research undertaken in federal laboratories in support of technology development is relevant to industrial requirements and compatible with the stated economic objectives; and to ensure that Canada develops and maintains a national competence in the research and development necessary for technological development.

The Minister of State for Science and Technology (Mr. Johnston) has recently appointed a task force to review and recommend improvements to federal policies and programs related to technology development. The task force, which will report directly to the Minister, will review the Government's intramural science and technology activities and make recommendations on whether Government research is relevant to industry's needs. It will also study the Government's industry support programs, policies currently in place to enhance our R and D in the business sector, and possible improvements to university-industry co-operation with regard to R and D. The task force, comprised of representatives from industry, univer-