

Science, Technology and Economic Development

INTRODUCTION

On November 8, 1984, the Economic and Fiscal Statement presented by the Federal Government identified *private sector growth as the main engine of economic recovery*. Canada must recognize that *innovation is the key to that engine*.

"As much as two-thirds of recent economic growth has been attributed to technological change and there is every reason to believe that its influence will grow.

"If we are to be competitive, we must become effective in applying leading-edge technologies in producing goods and services."

(A New Direction for Canada:
An Agenda for Economic Renewal,
Department of Finance, 1984)

The combined challenges of the national deficit and high unemployment demand that the level of private sector research and development (R&D) performed in Canada be increased. Current indicators show that Canada now lags seriously behind many nations in several areas. Our international competitors invest more than twice as much in R&D as we do (Appendix B). The statistics for 1984 indicate that we have invested only 1.24% of our GNP in R&D, compared to the OECD (1981) average of over 2.2%. It is generally accepted that a positive relationship exists between technological advancement and economic growth (Appendix D).

Our mandate is clear. Federal, Provincial and Territorial governments must work together to *inspire the private sector to immediately and significantly increase its investment in research, development and innovation*. As a nation, we cannot afford to let the tremendous opportunities of technological advancement pass us by.

The expanding involvement of the provinces requires close collaboration to ensure that scarce human and material resources are effectively managed. The Economic and Regional Development Agreements (ERDA's) and their subsidiary agreements provide a basis for this purpose. The upcoming Science Ministers' Meeting, First Ministers' Conference and Economic Summit are other mechanisms.

A number of priorities should be identified if Canada is to remain at the forefront of technological advancement. These might include:

1. Increase private sector investment in innovation
2. Accelerate the rate of diffusion of technology/information
3. Redefine the role of government research and development
4. Recognize the importance of academic research and development.

Some government policy changes may be desirable in order to address each of these priorities. This paper offers some issues for discussion. While some of these issues do not fall within the jurisdiction of the Ministry of State for Science and Technology, they do affect our national industrial climate for innovation and, as such, are addressed here.

The issues presented here are not mutually exclusive. In a time of fiscal restraint, any future decisions regarding the possible implementation of selected issues will have to be made in this context.