DISCUSSION OF PRIORITIES AND ISSUES

1. Increasing private sector investment in innovation

A. BACKGROUND

Industrial innovation is an investment issue. Business leaders must perceive both an economic incentive and an industrial opportunity for the investment. The incentive can be generalized as a chance to increase the firm's competitive edge in the marketplace. The opportunity will be the application of in-house R&D or, as is most often the case in Canada, the adaptation of foreign technology. This new technology may update existing R&D methods, modernize the production line, improve office communications and productivity, provide new marketing techniques or generate a new line of goods or services. Private investors must also recognize the potential benefits of innovative ventures.

In the words of the European Management Forum:

"a country's overall investment rate must be regarded as an important indicator of its longer-term economic health and thereby of its international competitiveness."
(1985 EMF Report on International Competitiveness)

Canada is struggling to establish itself as a major technology performer. Comparisons of international data are presented in Appendix B to this paper. Comparisons of provincial data are presented in Appendix C.

Our growth in real Gross National Expenditures (GNE) and employment is similar to other OECD countries. However, we devote significantly less of our economy to R&D. The number of Canadian patent applications is *at least one order of magnitude lower* than that of our major international competitors. In addition, our weak balance of trade is highlighted by an exceptionally low export/import ratio for most categories of technical goods.

A recent Conference Board of Canada release indicates that the rate of increase in corporate spending for R&D is expected to fall from the 1984 level of 17.1% to 5.6% in 1986. This slowdown in R&D activity is likely to be concentrated in the primary and manufacturing sectors — the foundation of our economy.

Business leaders generally agree that our national level of R&D is insufficient. *It remains a paradox, however, that they consider their own company's R&D investment to be adequate.* These leaders hold a positive view of the current climate for R&D, recognize a national requirement for increased innovation and yet have not identified incentives for further investment by their own firms.

Provincial and Federal governments could jointly encourage firms to be more future-oriented and to invest in longer-term R&D activities. The risks may be perceived to be greater, but the rewards will include a larger and more dependable share of the international marketplace.

The recent Canadian Manufacturers' Association Paper, A Future That Works, states that:

- technology should be used as a "competitive weapon"
- the private sector must sustain its growth in R&D spending
- present government policies to support industrial R&D are working and do not need fundamental revision.

Nationally, we should strengthen our efforts in the area of cooperative industrial research. Examples of such programs are found in France (ESPRIT), Japan (ICOT), the U.S. (MCC) and Britain (ALVEY). Such cooperative programs would be instrumental in establishing Canadian expertise in emerging technologies (space, microelectronics, biotechnology, etc.).