Although the Canadian engineering consultants have more possibilities to co-operate with the French on capital projects, opportunities exist for machinery and equipment manufacturers as well as for prime contractors.

Canadian Capabilities

Canadian companies have shown a strong competitive position in infrastructure projects such as transportation, hydro-power and communications. An important expertise is held also in the design and construction of industrial complexes, notably pulp and paper mills, oil and gas, and other mining areas. There is a limited export capability (albeit a growing one) in other types of industrial complexes, such as petrochemical and chemical, where the French have extensive experience.

The four main Canadian industrial sectors participating in capital projects are:

a) *Engineering Consultants:* In terms of international performance, Canadian consultants have been more aggressive in pursuing capital projects abroad than have manufacturers or contractors. Although major Canadian engineering consultants firms rank among the largest in the world, they do not have an important financial asset base. In general, these firms cannot afford the risks involved in pursuing projects on a turnkey basis, but rather focus on the consulting, detailed design and management of these projects.

b) *Machinery and Equipment Manufacturers:* Although these Canadian firms have a much stronger asset position than Canadian consultants or contractors, they do not generally take the lead in capital projects. Only a few have acted as prime contractors providing both their own and sub-contractor goods and services. Most avoid participation in consortia because of the risk of joint and separate liability and in general, their involvement in capital projects is limited to a sub-contracting role. About 100 large firms export major capital equipment and components. Of these, nearly half appear to meet the following criteria for acting as prime contractor:

- size
- competitive products and technological advantage
- international experience
- ability to supply major components for a project
- head office support if the firm is a foreign-owned subsidiary.

c) *Project Management/Prime Contractors:* This group includes many large and small commercial and residential building contractors who operate exclusively in Canada. Because of the risk involved and also because a fair number operate as branch plants primarily for the Canadian market, there are few large contracting firms executing capital projects abroad.

d) *Mining Companies:* Several mining and mineral processing companies in Canada have generated some capital projects abroad as investors rather than as participants in consortia.

Recent Canadian Marketing Activity

Major engineering firms in France and Canada have had some contacts with each other, and a fair number of co-operative efforts including joint bids have already been made. Two of the larger Canadian firms have offices in Paris and monitor the potential market closely.

The Embassy has been in contact with a number of important French engineering and construction firms providing them with contacts/sourcing and information on questions of financing.

Impediments and Advantages

Because joint project bidding will generally be on an ad hoc basis, Canadian companies possessing advance knowledge of project planning in third countries will have an edge on the competition. Information on project planning is usually not readily available to firms other than those involved in the initial phases. Potential bidders discovering these projects only when officially announced, will normally face competition which has already attained the advantage.

The markets for capital projects have been dominated by large multinationals. Several of our more active contractors have some degree of French ownership which can provide these companies with a natural and more comfortable affiliation for co-operative ventures in third countries.

Small, lesser-known contractors and engineering firms, with limited experience abroad, will have very little chance of participating in such joint ventures except where highly-specialized capability is required. The French will be looking for proven companies with solid financial background and support.

The French will expect Canadian firms to take their fair share of risk and bring financing. The Export Development Corporation's (EDC) ability to take the lead in arranging project financing may be useful for potential Canadian participants. Also, EDC can frequently offer longer repayment periods that are appealing to French "packagers" of third-country projects.

The Action Plan

Considering the facts that (1) some capital projects cannot be undertaken solely by Canadian firms; (2) there is often a need to share risk, financing and knowledge on major projects; (3) potential French participants may have from time to time an edge on Canadian firms because of advance knowledge, previous experience and/or valuable contacts in the receiving country; and, (4) co-operation in third-country projects will generally be on an ad hoc