Canada's Export Development Plan for

JAPAN

External Affairs Canada
Affaires extérieures Canada

CANADA'S

EXPORT DEVELOPMENT PLAN

FOR JAPAN

Government of Canada
Department of External Affairs

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FOREWORD

Canada's Export Development Plan for Japan has been prepared to assist existing and potential exporters interested in expanding business in Japan. The review and analysis of this market provide the basis for the market development activities planned by the Department of External Affairs in conjunction with other federal departments in Japan over the next two to three years. The provincial governments, also active in supporting Canadian exporters, were consulted during the preparation of the plan. The development plan covers Canadian interests in Japan and highlights significant market opportunities in several specific sectors in which Canadian supply capability is well established.

The plan is presented in three parts. The Executive Summary provides a brief review of Canadian/Japanese trade relations and highlights the principal market opportunities identified for each of the industry sectors included in the plan. Part I, the Market Overview, focusses on bilateral Canada-Japan relationships and socio-economic and political conditions in Japan. This will be particularly useful to the reader seeking a broad introduction to the Canada-Japan trade environment. Part II, Market Opportunities and Sector Marketing Plans, will be of most interest to firms supplying goods and services in the selected industry sectors.

CONTENTS

EXECUTIVE SUMMARY

Objective

The major theme of the Canadian export strategy for the 1980s, as approved by the Federal Government, is the need for selectivity of markets and for greater focus and co-ordination of Canada's export marketing efforts. In this development plan, the government recognizes the critical role of the private sector and invites its participation and that of the provinces in pursuing those activities that will contribute to expanding Canada's share of the Japanese market.

In addition to those industry sectors in which significant trade with Japan has traditionally occurred and is likely to continue, a number of other sectors offer attractive prospects over the next few years. The "matching" of areas of Japanese demand with Canadian supply capability is undertaken in Part II of this plan. That section specifically sets out, under 10 industrial sector categories, recent Canadian export performance, the opportunities and constraints that future export efforts must address, and outlines an action plan taking those factors into account.

The specific goals of this plan are:

1. to provide a framework for Federal Government action and resource allocation in establishing an effective program of assistance to exporters, and in fostering an environment conducive to Canadian export development in Japan;

2. to design a marketing plan that takes advantage of the market opportunities and overcomes the constraints affecting Canadian exports to Japan;

3. to identify opportunities for export concentration and to stimulate and assist the private sector in pursuing them;

4. to establish a starting point for the co-ordination of the marketing efforts of the federal and provincial governments in support of the private sector.

Introduction: The Japanese Economy in the 1980s

The Japanese economy in the 1980s is expected to respond rapidly to new challenges and opportunities, whereas Japanese society itself will probably retain its unique characteristics and many of its traditional ways. Japan's most important economic objective is to limit its current heavy dependence on imported energy. This Japan plans to achieve by reducing the imported oil portion of primary energy consumption from 70 to 50 per cent, and increasing the use of coal,

liquified natural gas (LNG) and nuclear power. An overhaul of Japan's industrial structure and a rationalization of some of the high energy input industries (smelting, aluminum, fertilizers, petrochemicals) will be undertaken, while at the same time Japan will be seeking to retain residual domestic supply capacity for strategic reasons. Japanese corporations are likely to continue the shift to knowledge-intensive high-technology complex assembly industries based on investment in research and development. Japan will be on the leading edge in frontier industries (e.g. computers, electronics, biotechnology, robots).

Total government and private sector research and development spending throughout the 1980s is expected to continue at a high level and will be focussed on the development of priority technologies in four major areas: (a) energy (nuclear, coal, solar and electrical); (b) quality of life (urban transport, medical equipment, environmental protection systems); (c) information industry (communications, technology, information storage, computer); (d) new materials technology (better insulation, ceramics, biotechnology). The traditional industries of shipbuilding, automobiles, and consumer electronics will probably concentrate on more specialized higher technology lines. Products for the consumer mass markets are expected to be increasingly produced in branch plants in the newly industrialized states of Asia, using Japanese technology and manufacturing processes.

Although the links among government, banks, business and labour in Japan strengthened throughout the 1960s and 1970s, there is likely to be a general reversal of this trend during this decade. As Japanese companies and banks become more international in scope, and as institutions in Japan increase, the government may be hard pressed to maintain as tight a control on the national economy as it has in the past. The recent rounds of trade liberalization measures suggest that Japan is showing a willingness to increase imports from both industrialized and developing nations and to seek ways to redress the balance of trade surpluses it now has with many countries.

All long-term economic plans for Japan in the 1980s predict a "new era of stable growth" (an average of perhaps 3 per cent growth in real terms) with increases in disposable income brought about by holding down the rate of inflation and increasing real wage rates in line with gains in productivity. An increase in the demand for better housing arranged in more orderly urban environments, as well as demands for better medical care and community service facilities can be expected. The population may gradually shift away from the major cities to improve quality of life.

The development of the Japanese economy and the social system is likely to have major trade and political implications for Canada.

The most promising trade prospects for Canada in Japan occur in the following industry sectors:

- Forest products
- Petrochemicals
- Nuclear reactors and uranium
- Electronics
- Agriculture and food products
- Marine industries
- Automotive parts
- Coal
- Non-Ferrous metals and minerals
- Manufactured products.

Overview of Canada/Japan Trade

In the 1970s, trade between Canada and Japan grew dramatically. By 1973, Japan had become Canada's second largest trading partner, although Canada ranks 12th in export markets for Japan. Unlike the United States and the European Economic Community (EEC), Canada has been able to consistently maintain a trade surplus with Japan, albeit lower in 1981 than in 1980.

Japan has been the fastest growing market among the major industrial countries for Canadian exports. The Japanese market is particularly important to economic development in Canada's western provinces, since it provides the impetus for major production related to coal, rapeseed, pulp, lead, zinc and copper. The market size, the above average economic growth, the improved access to the market, the increasing Japanese investment in Canada, and the importance of Japan to Canadian economic development objectives, are the major reasons why Japan is such an attractive market for Canada.

Canada's traditional strengths in Japan have been in metals, minerals, forest products, and in agriculture and food products. The Japanese import market is huge, representing $143 billion in 1980. The market for fully manufactured goods was about $19 billion in that year. On the trade front, Canadian exports to Japan are expected to increase rapidly during the late 1980s and early 1990s as major new resource projects come on stream. Since the strength of Canada's trade with Japan is the resource sector, it will be important to build on that base by encouraging joint ventures, equity investment and technology exchanges, as well as by maximizing the industrial benefits from energy-related projects. The further processing of resources in Canada is a primary objective for Canada's future economic development.

Recent Japanese efforts at trade liberalization, including the removal or reduction in a number of non-tariff barriers for manufactured products, are part of Japan's efforts at "opening its doors". To respond to this development, Canadian firms producing fully manufactured goods for export must concentrate on, and develop their own technological edge. To be successful, such Canadian firms must approach the Japanese market with internationally competitive products of consistently high quality. They must show a strong commitment to

advanced technology and design, a willingness to adapt to Japanese requirements and the ability to provide technical follow-up support and servicing.

Canadian Trade Development Efforts to Date

In 1981 Canada exported $4.5 billion worth of products to Japan and imported $4.0 billion. Although Canada's traditional trade surplus continued in 1981, it dropped considerably from the $1.9 billion recorded in 1979. More than 80 per cent of Canada's exports to Japan originated in either British Columbia or the Prairie Provinces, emphasizing the strength of Canada's resource-based trade. The thrust of Canada's trade development efforts in the resource sectors has been twofold - greater market access for Canadian products in Japan and reduction in the cost of entering that particular market through federal and provincial government export assistance programs.

During the 1970s, the proportion of Canadian exports which underwent some degree of processing showed a steady increase and represented about 43 per cent of Canada's total exports to Japan by 1980. The Japanese are very familiar with Canadian production capacities and supply capabilities in the resource sectors because of their frequent visits to Canada and those of Canadian suppliers to Japan. The nature of the Japanese demand for these commodities, and the related infrastructure and service requirements, have linked the federal and provincial governments (notably British Columbia and Alberta) and the Canadian private sector, causing them to work closely together.

Information gathering and monitoring of trade developments are important export "service" activities, and are carried out at both Federal and provincial levels.

The Canadian Embassy in Tokyo aids Canadian exporters in their pursuit of new market opportunities in Japan. Services are also provided by the offices of the Provinces of Alberta, Ontario and Québec in Tokyo. The Federal and provincial governments participate in promotional programs which include missions, trade fairs and in-store promotions. British Columbia, for example, has a very active program of missions and visits, often at a ministerial level.

Specialized trade exhibits and solo shows are held at the Canada Trade Centre (CTC), which, since its inception in 1979, has proven to be an excellent market entry and support vehicle for numerous Canadian companies. Trade publicity is an important element of trade development activities in Japan. With the assistance of a Japanese advertising agency, the Canadian Embassy prepares a Japanese language trade publication, Japanese language directories and catalogues, and publicizes the range of products exhibited at trade shows.

Complementing these trade development activities are Federal and provincial government efforts to attract Japanese investment and technology to Canada. To review issues of interest, opportunities,

and irritants in the Canada/Japan economic relationship, a number of formal and informal bilateral mechanisms for consultation exist at the government level. The most important of these is the Joint Economic Committee which, in turn, led to the formation of a Canada/Japan Working Group on Resource Processing. The latter group began meeting in 1981 with the objective of encouraging dialogue with the Japanese on the advantages of the further processing of resources in Canada prior to export. To date three meetings have been held. The early meetings focussed on horizontal issues such as energy costs, transportation, labour, investment incentives and environmental factors which influence choices of locations for resource processing. The April 1982 meeting dealt with the petrochemicals sector and non-ferrous metals sector will be discussed in the future.

In the private sector, a number of Canadian companies have established sales/service offices in Japan and others should consider this option. Regular contacts between the British Columbia Council of Forest Industries and the Japanese "2X4" Association, and between the Japan Paper Association and the Canadian Pulp and Paper Association, have produced significant exchanges of technical information. In addition to the discussion of industry-wide problems, such meetings have encouraged the participants to establish informal business relationships which are of value to their own firm's sales efforts.

The most important joint consultation development at the private sector level was the formation of the Canada/Japan Business Co-operation Committee in 1978. The establishment of this organization resulted from a recommendation by a senior Japanese executive who, after visiting Canada in 1976, felt that closer links between businessmen in each country should be forged, and consideration should be given to setting up a bilateral forum. The first meeting was held in Tokyo in May 1978 and since then annual conferences have been held alternately in Canada and Japan. These meetings provide the opportunity for very senior executives to discuss a wide range of commercial and economic matters and to explore ways of increasing co-operation between the two countries or between individual companies.

Future Market Opportunities

Canadian exports to Japan are expected to increase during the 1980s provided that competitive price and quality advantages can be maintained or improved in various industrial sectors.

On a sectoral basis, the resource sectors - coal, petrochemicals, non-ferrous metals, forest products and agriculture and food products - will probably account for the predominant portion of Canada's exports to Japan.

In the case of coal, since the Japanese demand for thermal coal is forecast to increase tenfold by 1995, Canada expects its exports to Japan to reach 10 million tonnes by that date. Recently concluded

metallurgical coal contracts will nearly double the volume of Canadian coal supplied to Japan by 1985.

The Canada/Japan energy relationship could be broadened further by joint ventures in the supply of LNG to Japan. As with all energy-related megaprojects, energy-related exports to Japan offer "indirect exports", in the form of infrastructure and services, to Canadian manufacturers from all regions.

As Japan moves towards a less energy-intensive base, certain power-intensive industries such as aluminum, zinc, and ferro-silicon are expected to decline. While these trends could affect some traditional non-ferrous metal concentrate exports to Japan, they may also create new opportunities for more resource processing in Canada and for greater exports of metals.

The restructuring of the Japanese petrochemical industry could result in its decline as a major export force and Japan could become a substantial importer of primary and intermediate petrochemical products. Canada's intention to develop a world-scale petrochemical industry will likely fit in well with those Japanese restructuring activities in this sector, and significant volumes of the Canadian product could be flowing to Japan by the mid-1980s.

As Japan restructures its domestic pulp and paper industry, opportunities could exist for Canadian exports of lower-end paper products, such as lightweight newsprint. This restructuring may also lead to investment abroad including in Canada. Continuing expansion of the Canadian platform frame (2X4) system of residential construction in Japan creates opportunities for growing exports of Canadian softwood lumber and plywood.

Reforms have been expected in the Japanese agricultural sector in response to pressures by major trading partners, but these may be slow in coming due to strong resistance by Japanese farmers. The proposed reforms may open further opportunities for Canadian agricultural sales since more processed products are expected to be imported from abroad. Fisheries will continue to be a sector of ever-growing importance, as Canadian companies penetrate the Japanese market even further, particularly if Japan bows to pressure to liberalize trade in the fisheries area.

Fully manufactured products had a value of $181 million, or only 4.0 per cent of Canada's total exports to Japan in 1981. Nevertheless, in certain consumer commodities like furs, sporting goods/sportswear, jewellery, and floor coverings and in certain specialized industrial goods (e.g. health care products, instrumentation, aerospace), some progress has been made, and further growth of exports in these areas is anticipated. Penetration of the respective Japanese markets for auto parts, ocean industries, telecommunications and other equipment for the electronics sector, has been modest to date. Opportunities exist in all these sectors for innovative, high quality products.

Within the next two years, Canada will either have succeeded in introducing CANDU to Japan or will be in a position to consider the reassignment of resources for pursuing such a sale.

The Overall Strategy

This market development plan for Japan identifies a number of instruments available to the federal and provincial governments to assist Canadian companies in increasing their penetration of the Japanese market. Such forms of assistance have been developed in response to the need to capitalize on opportunities and overcome constraints existing in export markets. A summarized action plan for Japan, included with this Executive Summary, identifies a number of activities and events planned for improving Canadian export performance in the Japanese market.

Although it has been an objective to make this plan as comprehensive as possible, future export opportunities in Japan will arise. Business people pursuing exports to Japan should take full advantage of the services and information provided by the public sector in both Canada and Japan (i.e. federal and provincial trade officials, Canadian government publications, and the Japan External Trade Organization (JETRO) brochures). Since many features of Japanese business practices are unique, and data in this plan will be rapidly superseded in the dynamic Japanese market, Canadian business people are invited to direct questions to the appropriate federal and provincial ministries responsible for trade. Some useful contacts are listed in Appendix II, p. 229.

Continued use of such federal instruments as the Fairs and Missions Program, and the Canada Trade Centre is planned, with importance being given to high-level government-to-government visits. The Program for Export Market Development (PEMD) will also be promoted. PEMD F, for example, helps companies sustain ongoing market analysis, market development activities, and assists them to establish sales offices in overseas markets. PEMD B and C, which respectively assist companies in market identification and participation in trade fairs, will also be of particular benefit to firms exporting to Japan.

Steps will also be taken to make Japanese buyers more aware of Canadian expertise and products through seminars, speeches by ministers, publicity, press releases, pamphlets and other promotional materials. The Japan and South Pacific Division of the Office of Trade Development Asia and Pacific (DOJ) in the Department of External Affairs will have overall responsibilities for the co-ordination of the implementation of this market development plan. In sector-specific areas, industry sector branches of the Department of Regional Industrial Expansion and other federal departments with sectoral interests, for example, Agriculture Canada and the Department of Fisheries and Oceans, will have responsibilities for assisting in the implementation of the plan.

The key to the success of this market development plan is the co-ordination and co-operation of all federal departments, provincial governments, and the active involvement by business and industry. Consultation in the formation of the plan with the provinces, and with other federal departments has taken place. Ongoing consultations by departmental officials with business people have ensured that private sector views were incorporated.

Doing business in Japan demands a high degree of commitment to that market and the dedication of resources to pursue it. Successful business people in Canada have become acquaintances and friends with their Japanese counterparts and have learned to break down the "psychological barriers" (i.e. myths and misconceptions) which supposedly exist in dealing with Japan. All potential exporters to Japan can benefit from that experience. Given a concentration of effort and a dedication of purpose to the pursuit of the Japanese market, there is every reason to expect that Canada will benefit from Japan's economic growth and development in the 1980s.

SUMMARIZED ACTION PLAN FOR JAPAN

TIMING*	ACTIVITIES/EVENTS (CONTACT**)
	Forest Products
	Increase the number of exchanges between government and private sector bodies through the Canada/Japan Housing Committee meetings. **(Post/RIB)**
	Continue discussions/exchanges between the Canadian Pulp and Paper Association and the Pulp and Paper Research Institute of Canada, and their respective Japanese counterparts, on an annual (or 18-month) basis. **(RIB)**
	Continue the major lumber and plywood market development efforts under the Co-operative Overseas Market Development Program funded jointly by the federal government, the British Columbia government and the Council of Forest Industries of British Columbia. **(RIB)**
	Organize forest products and technical housing missions and seminars (involving architects, framers and builders) to encourage expanded platform frame construction (2X4) activity, and encourage visits of influential Japanese industry people (building trade, Do-It-Yourself retailers) under the Incoming Visitors Program. **(Post/DOJ/RIB)**
	Continue to press the Japanese government for the elimination of the 10 per cent duty on dressed spruce/pine/fir and the 15 per cent duty on softwood plywood. Pursue changes in the Japan Agricultural Standard relating to plywood and the Japanese building codes, to allow unrestricted imports of softwood plywood for structural use. **(Post)**
1983/1984	Promote manufactured wood products and Western red cedar products through shows at the Canada Trade Centre. **(DOJ/RIB)**

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* Unless otherwise indicated, the activity/event is considered to be ongoing.

**The symbols for contacts are listed in Appendix II, pages 229-236. The federal contacts indicated have the primary responsibility for the implementation of the activities/events; others (not listed herein) may have secondary responsibilities.

TIMING	ACTIVITIES/EVENTS (CONTACT)
	Analyze how high-value papers, boards and paper products could be better traded in Japan. **(Post)**
	Follow up on Canada's position in the sawn lumber market with respect to Japanese purchases of manufactured lumber in lieu of logs. **(Post)**
	Petrochemicals
1982/1983	Follow up discussion/exchanges on petrochemicals pursuant to the 1982 Canada/Japan Business Co-operation Committee meeting held in Sapporo and continue the dialogue with the Japanese government on petrochemicals through the Working Group on Resource Processing. **(Post/DOJ)**
	Continue to evaluate and encourage joint Japanese/ Canadian ventures in the petrochemical sector. **(Post/CHE)**
1982/1983	Evaluate and assess the 1982 Japan Industrial Structure Council report on the Japanese petrochemical industry for its implications on the Canadian petrochemical industry. **(Post/CHE)**
	Nuclear Reactors and Uranium
	Continue co-operation with the proponents of Canada's nuclear reactor in Japan to ensure the eventual success of CANDU in that market. **(Post/SCM)**
	Continue liaison with the Japanese nuclear power generating companies to reinforce the view of Canada as a reliable supplier of uranium. **(Post)**
	Electronics
1983/1984	Introduce Canadian electronics firms to the Japanese market through Canada Trade Centre shows. **(DOJ/ELE)**
1983/1984	Participate in Japanese electronics trade shows in the telecommunications and computer peripherals sectors. **(DOJ/ELE)**
	Encourage Nippon Telephone and Telegraph Corporation (NTT) missions to Canada to familiarize NTT technical and buying personnel with Canadian capabilities. **(Post)**
1983	Follow up on Telidon joint venture and technology exchange visits with Japanese companies. **(Post/STM)**

TIMING	ACTIVITIES/EVENTS (CONTACT)
	Agriculture and Food Products
	Arrange for the participation of Japanese industry representatives in Canadian International Grain Institute courses and technical seminars. **(Post/GMO)**
	Encourage the Canola Council of Canada to study the feasibility of establishing a permanent office in Tokyo. Increase efforts in Japan to stress the Canola designation. **(Post/GMO)**
	Encourage Canadian companies to consider expanding production of oilseeds in Canada and the upgrading and expansion of Canadian oilseeds processing capability. **(GMO)**
1982/1983	Promote Canadian fish and processed meat products through retail store and restaurant demonstrations, trade fairs and missions (including Foodex), all of which would be designed to place Canadian products in a better position relative to Japanese traditional and developing food habits. **(Post/FPB)**
	Continue to press the Japanese government for the eventual removal of the Japanese fish import quota system, and continue other informal discussions related to trade restrictions for fishery products. **(Post)**
	Tie in Japanese livestock buying missions to Canada each year with such federally sponsored shows as Western Agribition in Regina, and encourage Japanese participation in other provincially-sponsored shows, such as the Calgary Bull Sale. **(Post)**
	Encourage companies to develop promotional literature highlighting the quality aspects of Canadian cattle (including emphasis on champion Canadian livestock), their adaptability to Japan's climate, and Canada's demonstrated ability to deliver. **(FPB)**
	Encourage companies to find new ways to satisfy Japanese tastes for beef and pork and of meeting Japanese specifications. **(FPB)**
	Encourage companies to develop new methods of selling pork to Japan, (i.e. consumer-sized packs and standardized packing procedures for all pork products). **(FPB)**
	Encourage Canadian processed food and beverage companies to identify opportunities on a product-by-product basis,

TIMING	ACTIVITIES/EVENTS (CONTACT)
	and to develop a specific (longer-term) market plan for the product(s) identified for promotion in Japan. **(FPB)**
	Continue to press the Japanese government on the reduction or elimination of the tariff and non-tariff quota systems for processed meats. **(Post)**
1983	Follow-up on the Dehy Alfalfa Seminar and Research Mission held in Japan in 1982. **(Post/FPB)**
	Sponsor Japanese animal feed missions to Canada such as the National Co-operative of Feedstuff Wholesalers and the Japan Feed Council. **(DOJ/FPB)**
	Encourage Canadian producers to better accommodate Japanese baling requirements for peat moss. **(FPB)**
	Ocean Industries
	Promote Canadian ocean industry technology at annual Ocean Technology Exhibitions at the Canada Trade Centre in Tokyo. **(DOJ/AMB)**
1982/1983	Encourage the participation of Japanese buyers in major offshore oil and gas exhibitions in which Canada is represented, and co-operate in incoming ocean industries missions for offshore hydrocarbon technology and equipment. **(Post/DOJ/AMB)**
	Encourage the Canadian Ocean Industry Association and its Japanese counterpart to begin holding regular meetings for potential bilateral co-operation. **(AMB/Post)**
	Automotive Parts
1982/1983	Follow-up on the series of joint-venture missions to Japan which have taken place with a cross-section of Canadian companies new to the market. **(Post/STB)**
	Encourage the Canadian Auto Parts Manufacturers Association (APMA) member companies to pursue business opportunities in Japan and to establish a rapport with their Japanese counterparts (JAPIA) in assisting small groups of JAPIA members on their visits to Canada. **(STB/Post)**
	Encourage both the original equipment and aftermarket Canadian auto parts companies to visit the Canadian

TIMING	ACTIVITIES/EVENTS (CONTACT)
	personnel of the Japanese vehicle manufacturers. **(STB)**
	Encourage an increase in the participation of those Japanese auto makers active in Canada in the Expanded Automotive Components Remission Order Program. **(STB)**
	Coal
1982/1983	Arrange a Canadian coal seminar in Japan to increase the awareness of Japanese buyers with respect to Canadian coal supply capabilities, infrastructure development and government policies. **(Post/RIB)**
1983	Organize a mission to Canada by the Keidanren Energy Committee and other private missions, to examine Canadian thermal coal and infrastructure developments. **(Post/DOJ/RIB)**
	Encourage Japanese organizations to discuss with Canadian coal companies the formation of joint ventures for coal development. **(Post/RIB)**
	Non-Ferrous Metals
	Encourage joint ventures in the exploration and development of non-ferrous metals, and continue technical co-operation in the exchange of further processing technology. **(Post/RIB)**
	Continue the government-to-government dialogue on the further processing of non-ferrous metals and minerals through the Working Group on Resource Processing, and continue the industry-to-industry dialogue through the Canada/Japan Business Co-operation Committee. **(Post/DOJ)**
	Consumer Goods
	Support and actively encourage in-store fashion promotions in Japan for Canadian consumer products. **(Post/TCP)**
	Encourage Japanese importers/distributors to visit Canadian booths at major international fashion-related shows. **(Post/TCP)**
1983/1984	Promote Canadian fur products through a solo fur show in Japan to accommodate 10 to 12 exhibitors and apparel missions in active winter outerwear and fur apparel. **(Post/TCP)**

TIMING	ACTIVITIES/EVENTS (CONTACT)
	Promote Canadian sports equipment and sportswear at Canada Trade Centre shows. **(DOJ/TCP)**
	Promote linkages between major department stores in Japan and their counterparts in Canada. **(Post/TCP)**
	Arrange to tie in the Canadian Government Office of Tourism's annual "Big Ski" promotion in Tokyo each year with Canadian ski industry manufacturers' exhibits and shows in Japan. **(Post/TCP)**
1983	Promote Canadian jewellery products through a follow-up Canada Trade Centre jewellery show. **(DOJ/TCP)**
	Organize a showing by top Canadian designers/award winners in co-operation with DeBeer's Canada/Japan to publicize Canadian diamond award winners. **(Post/TCP)**
	Organize incoming Japanese missions to the Canadian Jewellery Trade Fair. **(DOJ/TCP)**
	Encourage linkages between the housing/interior furnishings manufacturers and carpet makers. **(Post/TCP/RIB)**
	Industrial Goods
1982/1983	Promote Canadian health care products through a follow-up Canada Trade Centre show. **(DOJ/CHE)**
	Organize outgoing missions to Japan and technical seminars on health care products. **(Post/CHE)**
	Promote Canadian instrumentation equipment to Japan through specialized one-company seminars in Japan to tie in with other "functional" areas of instrumentation (e.g. ocean industries, health care products). **(Post/DOJ/ELE)**
1983	Participate in the Japanese Air Show to promote Canadian aerospace products. **(DOJ/AMB)**
	Encourage technical co-operation discussions between the Canadian Air Industries Association and the Society of Japanese Aerospace Companies. **(AMB/Post)**
	All Sectors
1982/1983	Organize a Canadian mission to Japan as follow-up to the MITI Investment Mission to Canada in 1982. **(DOJ)**

I. MARKET OVERVIEW

OBJECTIVE

The introduction of greater focus and co-ordination to Canada's marketing efforts is the major theme of a "Canadian Export Strategy for the 1980s" approved by the Cabinet Committee on Economic Development. The elaboration of two-to-three-year marketing plans for Canada's priority markets is a central element of the strategy. This paper sets out an export development plan for Japan through:

- creating a strategy framework to guide the actions and resources of the Federal Government in providing an effective program of assistance to, and an environment for, Canadian export development in Japan;
- elaborating a marketing plan to take advantage of the opportunities and to overcome the constraints facing Canadian exports to Japan;
- providing a working document to use as the basis for discussions aimed at co-ordinating the marketing efforts of the Federal Government in co-operation with provincial governments and the private sector.

This export market development plan for Japan includes:

i) an identification of the opportunities and constraints for Canadian export market development in Japan;

ii) a review of past efforts of the Federal Government to promote Canadian exports to Japan and the bilateral framework within which these exports occur;

iii) an identification of the marketing segments where the Canadian share of Japanese imports may be improved or expanded;

iv) marketing plans for key priority sectors of the Japanese market, based on an analysis of the specific opportunities and constraints in these sectors;

v) an overall market development plan for Japan outlining methods of capitalizing on opportunities and overcoming constraints found to affect Canadian exports to that market, and recommending both appropriate changes to current promotional techniques and possible new techniques to facilitate export growth.

THE CANADA/JAPAN ENVIRONMENT

Canada/Japan trade and economic relations have increased significantly during the 1970s, particularly in comparison to Canada's relations with other industrialized countries. By 1973, Japan became Canada's second largest trading partner.

In 1974 the Canadian and the Japanese Prime Ministers respectively agreed that concerted efforts should be made to enhance political, academic and cultural contacts and diversify economic ties between the two countries, in order to complement and deepen relations which had been principally commercial up until that time. In the political sphere, ministerial visits, discussions at Economic Summits, in other multilateral forums, and annual bilateral discussions by foreign ministers have strengthened the habit of consultation. In the academic, labour and cultural spheres, exchanges, journalists' visits, and biennial consultations on science and technology have strengthened relations and provided a firmer foundation for expanded economic activities.

The continuing substantial growth in trade has brought major economic benefits to Canada, especially to western Canada. Two-way trade exceeded $8.5 billion in 1981, although the bilateral trade surplus, which was $1.6 billion in 1980, dropped to approximately $0.5 billion in 1981. Japanese investment[1] in Canada had grown to U.S.$920 million by March 1981 - an increase of 20 per cent in FY 1980, although still less than one per cent of all foreign investment in Canada.[2]

Canadian foreign policy objectives with Japan have been pursued within the context of Economic Co-operation embodied in the Framework for Economic Co-operation signed by the Prime Ministers of the two countries in 1976. As well, a range of mechanisms for consultation are in place, notably the intergovernmental Joint Economic Committee (JEC), which provides forums for regular discussion. Two recently established Joint Economic Committee subsidiary bodies - a working group on resource processing and a system of information consultations on agricultural trade - provide opportunities for discussions with the Japanese government on two significant aspects of Canada/Japan trade and economic relations. The Canadian and Japanese business communities have also responded to the need for senior level consultations by forming the highly successful Canada/Japan Businessmen's Conference which has met annually since 1978 and has greatly improved dialogue and understanding between the private sectors. These efforts have been supported by frequent ministerial visits to Japan from Canada, and to a lesser extent, by visits of Japanese ministers to Canada.

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1 Japanese investment in Canada figures are extracted from Japanese statistics, which represent licensed investment, not all of which may actually have taken place.

2 In Spring 1982, the Japanese Ministry of International Trade and Industry (MITI) sent a 38-member mission to survey the overseas investment environment in Canada. The general tone of the 300-page MITI report was positive and encouraging. Although problems with Canadian investment regulations and federal-provincial differences on industrial policy were noted, they were not portrayed as serious obstacles to future Japanese investment in Canada.

From Japan's perspective the trade relationship with Canada is positive. Canada has been a stable source of primary resources and agricultural products, a relatively open market for manufactured products, and an attractive country for Japanese investment abroad.

Canada has nonetheless been seeking to increase the proportion of processed and fully manufactured exports to Japan and to obtain better access for products, especially those in forestry, agriculture and fisheries sectors.

CHARACTERISTICS OF THE JAPANESE MARKET

1. Demographic and Environmental

The islands that form Japan occupy a land area of 378,000 km^2 equivalent to only 4 per cent of Canada's land mass. Since much of the area is mountainous, most of the population of 117 million is concentrated in relatively small regions. Japan's real population density is therefore a high 2,256 persons per square kilometre of arable land. Annual population growth in Japan is expected to average only 1 per cent in the coming years compared with a world average of 1.9 per cent. Since Japan's development in the post-war period has been characterized by an impressive rate of industrialization, about 76 per cent of all Japanese are now living in cities, particularly in the southern half of the main island of Honshu, stretching from Tokyo to Osaka and Kobe.

Although Japan is heavily forested, and at one time almost self-sufficient in timber products, demand in the country has outstripped the domestic supply capability with the result that significant quantities of all lumber are now imported. Similarly, although many minerals are found in Japan, most industrial raw materials are imported. Two-thirds of the country's coal supplies and virtually all of its oil requirements are purchased abroad. Since 75 per cent of Japanese energy consumption is oil, the stability of oil supply is a critical issue. As a result, a major objective of the Japanese government since 1973 has been to reduce this energy vulnerability by diversifying into solar, nuclear and coal energy. Twenty-two reactors are now in operation with 16 more planned or under construction by 1989. National targets include reducing reliance on oil to 43 per cent of total energy requirements by 1995 and increasing nuclear power to a 14 per cent share of energy needs from its present 2 per cent.

2. Socio-Economic Conditions

Between 1960 and 1973 Japan enjoyed a real GNP growth rate exceeding 10 per cent per year. By 1981, total GNP was U.S.$1,137 billion. As a result of the appreciation of the yen relative to the U.S. dollar over the 1977-1980 period, Japan enjoyed a per capita GNP for 1980 of U.S. $8,902, below the U.S.

level but higher than several West European states. In 1980, Japan's GNP had grown to 235,762 billion yen or approximately U.S.$1,092 billion(see Table 1, p. 210). By comparison, Canada's GNP in 1980 was slightly more than U.S.$249 billion while the United States registered a 1980 total of U.S.$2,626 billion. In recent years growth rates for the Japanese economy have fallen (2.9 per cent in 1981), and the economic performance is expected to stay in the range of 4 to 6 per cent per year for much of this decade. That rate of growth, however, will likely exceed most growth rates elsewhere in the developed world. In fact, according to OECD forecasts, Japan will achieve the highest per capita GNP in the world by the year 2000.

The ability of the economy to withstand the shocks of the major round of oil price increases in 1979 was attributed in part to the fact that increases in worker productivity during the 1970s had outpaced growth in real wages. Since 1960, Japanese labour productivity in manufacturing has increased at an average annual rate of 8.2 per cent, exceeding that of all other OECD nations. In some industries, productivity achievements have been dramatic. In the case of colour television manufacturing, for example, the time required to assemble a unit was reduced from 6 man-hours in 1972 to about 1.5 man-hours by 1978. Since 1975, only West Germany, among Japan's major OECD trade competitors, has also experienced a rate of overall productivity growth that has outpaced unit labour cost increases (Table 2, p. 211). Consequently, the country's international competitiveness has been enhanced.

Total employment in 1980 was 55.4 million persons. Only 5.8 million people, or 10.4 per cent of total employment were engaged in the primary sector of the economy. Since 1973 the primary sector has lost ground to others in terms of employment, at an annual rate of 2.8 per cent. The secondary sector, including manufacturing and construction, has held a relatively constant 35 per cent share of total employment since 1973. Predominant employment growth has occurred in the tertiary sector with 54.8 per cent of total 1980 employment, or some 30.3 million people in 1980. The relative employment position of service industries in particular has grown by 2.8 per cent per year since 1973 and 3.3 per cent per year over the 1975-1980 period alone (Table 3, p. 212 and Table 4, p. 213).

Labour-management relations in Japan are impressive and, indeed, have been the focus of considerable international interest because of relatively low antagonism in collective bargaining. Unionization includes just over 30 per cent of the work force. In contrast to the craft-union structure which is found in North America, Japanese unions are organized on a company basis. Consequently, union objectives are more closely tailored to specific conditions in each corporation. Workers in large

corporations enjoy a high level of job security and normally expect to work for the same company for their entire careers. Among smaller firms, where unionization is limited, labour turnover is higher and as a consequence the seniority-based wage structure is not as apparent as it is elsewhere. The official unemployment rate for the economy as a whole was less than 2 per cent in 1980, rising to 2.4 per cent by 1981. However, it is estimated that between two million and four million additional workers are surplus to the needs of industry but are retained by their employers in keeping with underlying Japanese attitudes towards employment.

The direct role of the Japanese government in domestic industry is relatively limited. Exclusive control is maintained over the production and sales of tobacco, salt and industrial alcohol products. The Nippon Telephone and Telegraph Corporation (NTT), which supervises the country's telephone and telegraph services, and the Japan National Railways, which controls a large part of the country's rail transportation network, are government-controlled organizations. A third company, Japan Airlines, is now reverting to private control.

The government's indirect role, exercised through what is termed "administrative guidance" can be a major factor in the economy. The acceptance by the private sector of government influence exercised in this manner has facilitated, for example, industrial adjustment to the OPEC price increases of 1973.

3. Macroeconomic Trends

The "oil shock" of 1973 was followed by the worst recession experienced by Japan since the early 1950s. Corporate profits were substantially squeezed and consequently investment and capacity utilization were reduced. The experience of that recession combined with the relatively low rates of growth during the subsequent recovery period to 1979, led Japanese authorities to encourage a restructuring of domestic industry to reduce industrial vulnerability to external conditions. Various incentives to industry, particularly accelerated depreciation and tax reduction schemes, have encouraged investment in energy conservation and labour rationalization. The real GNP increased by 24.5 per cent from 1973 to 1979, but total primary energy consumption increased by only 8.25 per cent and oil consumption alone by 1 per cent. These conservation measures have had the effect therefore of reducing costs of production in Japan, thereby lowering the rates of capacity utilization required for break-even operation.

A second thrust of industrial adaptation policy during the latter 1970s and continuing into the 1980s, has focused on the expansion of production in high value-added and "knowledge intensive" industries, those that demand either more sophisticated assembly

processes or higher technological inputs, such as micro-circuit electronics, aerospace and robotics. Developments in industrial machinery production have included the use of new process technologies and the growth of "systems businesses" in which entire plants are designed to serve export markets, notably in OPEC, COMECON, and newly industrialized countries.

These changes had been sparked by changing patterns in world and domestic demands and by the increased competitiveness of many developing countries in some of the lower-growth heavy and chemical industries which had traditionally been areas of Japanese strength. Such industries include electric and open-hearth steel, chemical fertilizers, aluminum smelting, synthetic fibre products, corrugated cardboard and shipbuilding. Excess capacity in Japan was curtailed through scrapping or conversion to new activities, and labour and energy rationalization schemes were introduced. In many cases, especially in aluminum and petrochemicals, some production capacity and new investment was transferred abroad, notably to southeast Asia, through joint venture agreements. Following this trend, Japanese equity investments in petrochemicals in Canada may show a significant increase in the years to come.

Much of the industrial restructuring has been achieved through the market mechanism at the initiative of Japan's private sector. The adjustment process was however facilitated by the Japanese government, through its macroeconomic and industrial assistance policies, by the attitudes of labour unions and the general adaptability of the Japanese work force, and by a pragmatic approach to anti-monopoly legislation.

These structural developments are some of the reasons why the 1979 oil shock was much more moderate in its effects than the 1973 energy price increases. Between 1979 and late 1980, the price of crude oil rose about 150 per cent. Although the government maintained a policy of allowing the market mechanism to pass oil price increases through to the final users, the rates of increase in the wholesale price index and consumer price index were less pronounced than in the 1973-1974 period. Real GNP growth was 2.9 per cent in 1981, down from 5.6 per cent in 1980. Buoyant private sector demand during 1979 and the sharp depreciation of the yen, led to a rapid growth in exports in 1980 after domestic demand began to stagnate. The underlying strength in the Japanese economy has been attributed to: the continuing investment in rationalization programs and in energy saving equipment; the confidence of business in the economy's ability to overcome oil price increases; and the improvements in corporate profits, particularly for those firms involved in export. In turn, these profit levels resulted from increased productivity (8 per cent for manufacturing in 1979) and the slow growth of nominal wages. Compared with other major OECD countries, the

extent of downward adjustment in wage increases in Japan at this time was significant. In 1980, Japanese wages fell in real terms.

At the time of the oil shock of 1979, the Japanese government had been pursuing the same generally expansionary fiscal policy that it had adopted in 1975. Total government expenditures amounted to 17 per cent of GNP. Japan's ninth Seven Year Plan, for the 1979-1985 period had been prepared before the 1979 oil crisis. Its declared intent was to put the economy on a course of stable growth and to provide greater social welfare benefits to the Japanese people. An investment of 240 trillion yen (at 1978 values) was allocated for public works programs to 1985 and social security payments were targeted to reach 11 per cent of national income by 1985, up from the 9 per cent level achieved in fiscal 1978.

Subsequent budgets however, have marked a return to austerity in the face of the new oil pricing situation and are designed to reduce the risk of fiscally-induced inflation and free capital markets for corporate borrowing. Public works and social security expenditures were severely curtailed. Only allocations for debt service payments, energy measures and transfer payments to local governments were allowed to increase at greater rates than presented in previous years' budgets.

Monetary policy shifted to restraint in early 1979 and has been progressively tightened. Stagnating domestic demand however, and a moderation in wholesale price increases, led Japanese authorities to reduce the discount rate to 7.25 per cent by November 1980 and to 6.25 per cent in March 1981. Reserve requirements were also reduced and controlled interest rates on term deposits and rates on private residential loans were lowered as well.

In late 1980, consistent with these measures, the pace of public works expenditure was allowed to pick up. Nonetheless, the 1981-1982 budget was more restrictive than the previous fiscal year's budget, and had the objective of reducing the deficit by about 2 trillion yen. New tax measures, including a 2 per cent increase in corporate income taxes, are expected to increase tax revenues by 4 or 5 per cent. In the 1982-1983 budget, defence expenditures showed the only significant increase.

4. Trade Policy

In large measure, current Japanese trade policy reflects the nature and requirements of overall domestic economic growth in Japan: a large, industrious and homogeneous population; a nation with an almost total reliance upon imported energy and raw materials; and public and private sector understanding that external trade is paramount to economic survival and growth. Since the early 1960s, in an effort to increase its share of

world markets, Japan accelerated its export promotion program. Japanese government and private sector policy-makers have always worked in co-operation to achieve long-term overseas marketing goals and, as part of this effort, the Japanese Government encouraged industry to undertake severe and often rapid structural changes. In the first half of the 1960s, labour-intensive industries such as textiles were phased out. Massive investments were directed toward capital-intensive industries such as steel, shipbuilding, and chemicals. Wage costs declined and industry successfully kept up with shifting demand in world trade patterns giving Japanese exports a sharp international competitive edge.

"The Vision of MITI Policies in the 1980s", prepared by the Industrial Structure Council, reflects the same basic philosophy, emphasizing the role that new, promising industries must take if Japanese overseas markets are to grow. Current adjustment policy, however, is faced with the limited prospects of declining industries (i.e. aluminum, petrochemicals). These industries with the notable exception of agriculture are receiving growing attention. In order to support a policy of improving efficiency in less promising industries, the Japanese Government permits certain producers under the Anti-Monopoly Act to form temporary anti-recession cartels under strict conditions. There are in addition several laws such as the Small and Medium-Sized Enterprise Organization Act and the Law on Temporary Measures for Special Industries, which permit the formation of anti-recession cartels designed to assist industries in phasing out excess capacity by adjusting their supply to demand instead of depending solely on the market mechanism.

In an effort to stabilize long-term energy supplies, Japanese energy and resource procurement policy is committed to both source diversification and to the maintenance of good relations with the developing world, which provides about 59 per cent of imported energy and natural resources and about 49 per cent of Japan's total export market. In consequence, the policy is directed toward long-term contract arrangements with more direct participation in the actual development of overseas resource projects in developing countries. This policy, referred to as the develop-and-import formula, may involve equity participation by Japanese companies, technology transfers and, on occasion, official aid assistance. Such arrangements are designed to deepen Japan's claims for resource access. Arrangements falling within this formula have been undertaken with Australia, Brazil, Indonesia and Venezuela, for aluminum; with Saudi Arabia and Singapore, for petrochemicals; and with Australia and Canada, for coal.

The entry of Japanese corporations into overseas markets appears to reflect not only the increasing sophistication of Japanese industrial and international trade policy but also the growing international division of labour. In the past, domestic economic

requirements almost exclusively influenced the economic activity of Japan's overseas corporations. Domestic requirements such as energy costs, a shortage of landsites, and pollution controls will continue to influence overseas investment patterns. Specific investments however are being designed to incorporate the development needs of host countries which, in turn, are attracted by the inherent transfer of capital, technology and managerial expertise which they lack. It is, therefore, expected that Japanese direct foreign investment activity will continue to grow in the next few years.

Japan became a signatory to the GATT in 1955. In spite of the government's public adherence to the principles of free-trade and non-discriminatory multilateral benefits, Japan has come under severe criticism for its protectionist measures through high tariffs, import quotas and non-tariff barriers. Japan has historically imported a smaller share of manufactured goods than it exported. By 1977 international pressure mounted as a result of Japan's dramatically increased exports and relatively low level of imports. During the following year, the Emergency Import Program was adopted, largely financed under the Export-Import Bank of Japan. Foreign currencies from Japanese international reserves were made available from the Bank on concessional terms to both public enterprises and private importers to finance approved imports. This program was terminated in late 1979 due to the depreciating yen and the rising costs of petroleum, raw materials and foodstuffs. Notwithstanding criticism from major trading partners, Japan in recent years has indicated some willingness to work toward greater trade liberalization as illustrated at the Tokyo Round of the Multilateral Trade Negotiations (MTN) and in the implementation of a number of major policy changes which should have a pronounced effect on both the Japanese exchange and trade systems.

At the MTN, Japan made a significant contribution toward liberalizing access to its market. Japan applied the tariff formula resulting in an overall average tariff cut of 40 per cent. Japan was also signatory to all major MTN agreements, of which the two most important in the Canada/Japan context were agreements on: Government Procurement, and Technical Barriers to Trade (Product standards). For the first time, Japan bound virtually all tariffs, adding further security of access to the Japanese market.In the interest of resource-exporting countries, Japan did not, however, substantially reduce barriers to the import of resource-based products.

The major changes to the exchange and trade systems in 1980, in addition to the implementation of the Tokyo Round agreements, were achieved through the continuing administrative liberalization of controls on capital inflows. This entailed the development of new policies on commercial bank foreign lending in domestic and foreign currencies and of the new "Foreign Exchange

and Foreign Trade Control Law" which permits foreign transactions in principle unless expressly restricted. Few changes have been made to current transactions other than substantially reducing reporting and eliminating advance approval requirements for certain technical assistance and service contracts.

Direct investment legislation is incorporated in the Foreign Exchange and Foreign Trade Control Law, replacing the previously separate Law Concerning Foreign Investment (see Appendix I, p. 226). Previous approval conditions have been replaced by a requirement for prior notice, following which the responsible ministers may suggest or demand that the transaction be suspended or some of its particulars changed. Direct foreign investment is subject to review and strict limitations exist in the agriculture, fisheries, mining and petroleum sectors and the leather goods industry.

In reviewing the impact of the industrial restructuring policy upon external trade, it appears to have assisted Japanese industry to adjust to a changing world economy. The Japanese economy has caught up to and is surpassing most economies to the point that it stands in the front rank of the industrialized nations. These achievements, nevertheless, will continue to have major repercussions at the international level. They have restricted specific sectors in Japan with the result that a dual economy has developed: one part of the economy is export-oriented and rapidly expanding, while the other is sluggish, unaffected by international trade and destined for domestic consumption. This duality is contributing to growing friction between Japan and its trading partners. There are signs that certain Japanese exports are causing severe trading difficulties for the producers of similar goods in other countries as in the case of automobiles and certain television tubes.

Japan's growing strength in international trade, seen in mounting trade and current account surpluses, is compounded by slower rates of economic growth as well as rising levels of unemployment in many other countries. The Japanese Government is acutely aware of the threat of retaliatory trade protectionist measures from trading partners. These pressures have given rise to defensive measures in Japan, most notably the appearance of government-inspired voluntary export arrangements and orderly marketing measures. To counter protectionist retaliation from American and European competitors, Japanese automotive manufacturers, as an example, are establishing co-operative investment and technological arrangements in an effort to avert domestic production cutbacks later in this decade.

5. Trade Characteristics and the Balance of Payments

In the past Japan has depended on a strong surplus in the merchandise account to offset the negative balances that the country tends to accumulate in invisibles, unilateral transfers and long-term capital flows. Japan's exports amounted to U.S.$130 billion in 1980 (Table 5, p. 214), after growing at the average rate of 20.5 per cent in nominal U.S. dollars since 1963. These exports are composed primarily of machinery and equipment, including motor vehicles. Motor vehicles alone, whose export revenues grew at an average 35 per cent per year between 1963 and 1980 in U.S. dollars and accounted for more than U.S.$23 billion in export earnings in 1980, equal to 17.9 per cent of total exports for the year.

Imports are dominated by foodstuffs, raw materials and mineral fuels (Table 6, p.215). Together these products account for more than 70 per cent of total imports. In 1980, total imports were U.S.$140.5 billion. Mineral fuels cost U.S.$70 billion, fully 50 per cent of total imports in 1980, while food and raw materials imports were valued at U.S.$14.7 billion and U.S.$23.8 billion respectively.

The petroleum price increases in 1979, which raised the cost of imported oil from U.S.$23.4 billion in 1978 to U.S.$33.5 billion in 1979, were largely responsible for the 1979 current account deficit which reached U.S.$8.8 billion after a 1978 surplus of U.S.$16.5 billion.

With the intention of counteracting the resulting downward currency pressures, various controls imposed on capital inflows were progressively dismantled in 1979 and 1980. The control liberalization measures had the effect in 1980 of increasing the inflow of long-term foreign capital, particularly portfolio investment, by U.S.$15 billion so that a net surplus on the long-term capital account was achieved for the first time since 1964.

Japan exports about 12 per cent of its GNP to a well diversified group of trading partners. In 1980, the United States, the country's largest trading partner, took 24 per cent of Japan's exports and provided 17 per cent of its imports. Saudi Arabia is Japan's second most important partner, taking 4 per cent of Japanese exports and supplying 14 per cent of its imports in 1980. Canada ranked 13th overall in 1980, in terms of destinations for Japan's exports, behind the U.S., F.R.G., South Korea, Taiwan, China, Saudi Arabia, Hong Kong, Singapore, Britain, Indonesia, Australia and U.S.S.R. But Canada is one of the few developed countries to enjoy a surplus bilateral trade balance with Japan. Canada purchased U.S.$4.04 billion f.o.b. in 1981 from Japan and exported U.S.$4.49 billion c.i.f., mostly raw materials, for a 3.2 per cent share of Japan's imports in that year (Table 9, p. 218 ; Table 10, p. 219).

The tendency for the Japanese economy to show a surplus merchandise account balance with most developed nations has become a source of concern to these countries and something of an embarrassment to Japan. The trade surplus with the European Economic Community was U.S.$8.8 billion in 1980, equal to 36 per cent of the total trade flow between Japan and the EEC in that year. The balance with the United States was a positive U.S.$7.0 billion in the same period, or 12 per cent of the total trade between the two countries.

CANADIAN TRADE WITH JAPAN

1. Trends in Canada-Japan Trade

Two-way trade with Japan has shown a steady growth over the past decade and totalled $8.5 billion in 1981 (Table 8, p. 217). Since 1973, Japan has become Canada's second largest trading partner, after the United States. Canada, although relatively less important to Japan, was Japan's sixth largest supplier in 1980 (third if oil imports were excluded). Canada held 3.4 per cent of the Japanese import market in 1980 compared with the import share of 17.4 per cent held by the United States and 5.0 per cent by Australia. Impressive as these figures may be, however, Canadian exports to Japan have failed to keep pace with the growth in the Japanese import market.

The breakdown of Canadian exports to Japan in 1980 was as follows: agricultural and food products (17 per cent); inedible crude products (45 per cent); inedible fabricated materials (35 per cent); and inedible fully manufactured end-products (2.4 per cent). Canada's leading exports in 1980 were coal, softwood lumber, wood pulp, copper, rapeseed, wheat, aluminum, pork, molybdenum, and fish products (Table 9, p. 218). Imports from Japan were almost entirely manufactured products, with automobiles and consumer electronics forming the major share (Table 10, p.219).

Increasing the degree of processing of Canadian exports to Japan, and increasing exports of fully manufactured goods, remain important Canadian goals. The proportion of Canadian exports to Japan that have undergone some degree of processing has shown steady growth in the past decade, representing about 41 per cent of total Canadian exports in 1981. While fully manufactured end-products equal only 4.0 per cent of our exports to Japan, these were valued at about $181 million in 1981, making Japan Canada's ninth largest market for such goods. Since the strength of Canada's trade with Japan is the resource sector, it is important to build on that base, and encourage joint ventures, equity investment and other forms of technology exchanges, as well as to maximize the industrial benefits from energy-related projects.

According to Japanese statistics, Japan represented a total import market of about $127 billion in 1981. This was a decrease of 9.8 per cent from 1980. The high cost of energy encouraged conservation, and a sluggish economy took fewer raw materials. Lower consumer demand also slowed imports of foodstuffs and textiles.

Canada's overall share of Japan's import market dropped to 3.2 per cent in 1981 from 3.4 per cent in 1980 (Table 12, p. 221), as did market shares of most of Canada's competitors in the Japanese market, mainly as the result of distortions arising from rapidly inflating oil prices. On a product specific basis, as shown in Table 11, p. 220, Canada is losing its share of the market for foodstuffs, and increasing it slightly in basic materials. In 1980, Canada experienced quite remarkable growth in its market share for manufactured goods (by Japanese definition these are items falling under SITC Chapter headings Nos. 5-8). Canada increased its share of the market for coal in 1981 quite substantially as a result of newly agreed thermal and metallurgical coal contracts.

In the area of "manufactured goods" (Japanese definition SITC 5-8)[2] Canada in 1980 became one of the top 10 exporters to Japan (Table 13, p. 222) and increased its market share from 1.7 per cent to 2.4 per cent. Petrochemical derivatives and processed non-ferrous metals led the way. Canadian sales of manufactured goods to Japan reached 16.6 per cent of total Canadian exports to Japan, up from 11.8 per cent in 1979.

2. Trends in Canada-Japan Investment

As of March 1981, Japanese investment in Canada totalled U.S.$920 million[1], representing less than 1 per cent of all foreign investment in Canada, and only about 3 per cent of all Japanese investment overseas. Canadian investment in Japan totalled $83 million as of 1978.

While Japan maintained strict controls on inward foreign investment for many years, these have gradually been liberalized to the point where foreign investors normally do not experience difficulty or delay with new business ventures. Restrictions still exist, however, in four designated sectors. Although, for the most part, no legal restrictions exist, cultural and business practices are such that takeover bids rarely occur. Much Canadian investment in Japan has been concentrated in the

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1 See note[1] on page 18.

2 That definition includes some "fabricated products" so that it does not match the Canadian definition of "manufactured products".

resources processing sector (nickel, aluminum, lead, zinc) primarily in the form of joint ventures. Most recent investments in Japan have been smaller in scale and more varied, and have involved the manufacturing service industries sector and distribution/sales outlets. The Japanese partner in a joint venture usually contributes valuable local experience, trained labour, management and land all of which may be in tight supply.

There continue to be investment opportunities for Canadian firms in Japan. Canadian banks will make substantial investments as they take advantage of recent permission to run full banking operations in Japan (a right that was denied until Japanese banks were given reciprocal privileges in Canada). Other companies may find it profitable to invest in sales and distribution, particularly for food products and resource materials. Canadian companies offering high technology products could find it advantageous to manufacture in Japan, particularly as their market grows and as the requirement for close liaison with customers in new product development increases. Some of these companies may find it profitable to enrich their stock of technical, managerial and labour skills and to keep abreast of the latest technological developments in Japan, both made possible by technology exchanges and by setting up an operation in Japan.

3. Trade Policy Considerations

It is widely held that Japanese economic policy is designed to ensure the maintenance of a converter economy whereby the import of manufactured goods is excluded by a range of non-tariff barriers, including directives from government to industry. Trade with Japan during most of the past decade has not reflected Canada's sophisticated industrial capacity, nor the degree of capital and technological flows which would be expected in relations between two major economies. Inroads have however been made, and as noted previously, Canada has become one of the top 10 exporters of manufactured goods to Japan. In the coming decade, Canadian efforts will be directed toward promoting a wide range of economic co-operative activities, including such investment and technological exchanges that will commit Japan to Canadian long-term economic and industrial goals.

In the Multilateral Trade Negotiations (MTN), Japan bound tariffs on a number of items of interest to Canada which should provide more assured access for Canadian products. However, reductions which would have significantly affected Canadian interests were moderate. The surplus supply situation in most of the market economies, in particular, the EEC and Japan, prevented Canada

from achieving virtually all its negotiating objectives for resource-based products. Both the EEC and Japan gave priority to protecting their processing industries rather than increasing the security of supply. In this respect, Canada did not gain substantially improved access for either non-ferrous metals or semi-fabricated products. In the case of numerous Canadian agricultural and fisheries products they remained under quantitative Japanese import restrictions.

Following full implementation of tariff concessions by 1987, the average Japanese tariff on non-exempt industrial products imported from Canada will amount to 4.8 per cent; this should assist in the export of further processed products. The Japanese tariff on pre-fabricated buildings and parts will be reduced from 7 to 4.9 per cent. The tariff on rough white woods (spruce, pine, and fir) will be reduced from 10 to 6 per cent beginning in 1984.

With respect to agricultural products, Japan agreed to bind duty-free entry for rapeseed, soybeans, tallow, mustard seed, rapeseed oilcake, breeding cattle and horsemeat. On an unbound basis, the tariff on fresh and frozen pork has been reduced from 15 to 10 per cent. In addition, the quota for grain-fed beef is expected to increase to 30,000 tonnes by 1982.

Japan has agreed to make substantial (30 to 50 per cent) tariff reductions in the fisheries area. Tariff reductions will be introduced on the following items of interest to Canada: frozen herring and cod and frozen hard roes thereof, fresh and frozen squid, dried and salted cod roes, and other dried and salted roe. Many fish products of interest to Canadian exporters remain under quantitative import controls. Japan on the other hand, is interested in securing as large as possible annual fish allocations in Canada's 200-mile zone. In order to establish guidelines, and a framework for regular consultations on bilateral fisheries questions, the governments of Canada and Japan signed an Agreement on Fisheries on April 1, 1978.

Japan was also signatory to the general agreements respecting non-tariff barriers. It is in Canada's interest to monitor Japanese implementation of these agreements and to ensure that the heavier pressures applied by both the U.S. and the EEC do not lead to bilateral agreements which would work to Canada's disadvantage.

The Canadian Government is continuing to take appropriate measures to encourage Japan to remove or reduce restrictions on Canadian products that traditionally face access problems. Outstanding trade issues of interest to Canada include: tariffs on refined non-ferrous metals; 10 per cent tariff on dressed spruce, pine and fir lumber; excessively stringent health, disease and

food additive regulations; Japanese Agricultural Standards; and quantitative import quotas on agriculture and fish products. Canada is pursuing the liberalization of these barriers through bilateral consultative mechanisms and other means.

After the October 1976 agreement signed by the Prime Ministers of Canada and Japan to facilitate a higher degree of trade and economic co-operation, the Framework called for the establishment of a Joint Economic Committee (JEC). Two subsidiary bodies have since also been formed: the Working Group on Resource Processing and the arrangement for Informal Consultations on Agricultural Trade. Both these sub-committees afford opportunities for regular government-to-government exchange. The Working Group on Resource Processing is designed to encourage a dialogue with Japanese officials on the relative economic merits of investing in resource processing activities in Canada. The early meetings focussed on horizontal issues such as energy costs, transportation, labour, investment incentives and environmental factors which would influence the choice of locations for resource processing. The last meeting in April 1982 dealt with the petrochemicals sector, and future meetings will focus on the further processing of non-ferrous metals. The Informal Consultations on Agricultural Trade provide a mechanism for discussions between senior Canadian Embassy officials in Tokyo and the Japanese Ministry of Agriculture, Fisheries and Forests on specific bilateral access problems affecting agricultural, fish and forestry product exports into Japan.

4. Japanese Investment in Canada

The gradual liberalization in Japan of inward direct foreign investment has been accompanied by a concomitant liberalization of Japanese overseas investments, resulting in considerable growth in Japanese investment overseas in the 1970s. Nevertheless, as the Japanese were slow to start their overseas investments, these still represent a very low percentage of GNP compared to those of other industrialized countries. There is room for large growth; indeed, Japan could become the world's second largest investor in the 1980s.

In Canada, Japanese investments are relatively small, but of increasing importance to the economy of western Canada. Most of the investment to date has been in the resources sector, in either resource exploitation or resource processing which Canada welcomes. The relatively small investment that has taken place in non-resource-related manufacturing has had mixed success. The balance of Japanese investment in Canada has been in commerce and service industries. The Japanese preference for joint ventures and minority equity positions coincides well with Canadian ownership goals. The presence of Japanese investment assures a stable market in Japan for the products from those projects. The

developments themselves, in addition to benefitting regional economies, have the potential of providing significant industrial benefits to Canada both in terms of creating large markets for Canadian equipment suppliers and engineering firms, and of transferring technology or knowledge/expertise to Canada. From the Japanese perspective, Canada represents a secure source of supply for raw materials and offers relative security of investment.

Although the Japanese have been slow to share the perception of the advantages of further processing in Canada, it appears likely that Canada will become increasingly attractive for investments in resource processing, particularly in the light of abundant energy and material resources and suitable plant sites.

Major investments in the resources sector either in place or proposed to date, include projects in forest products, oil and gas, petrochemicals and coal. Smaller investments have taken place in fisheries and rapeseed crushing. Investment in the commerce and service industries will continue to grow, reflecting the rapid growth in bilateral trade and business, but will probably decline in relative terms. Increased activities by financial institutions and trading companies should facilitate other investments and trade with Japan and could contribute to Canadian exports to third countries.

The Japanese have been reluctant to make investments in non-resource-related manufacturing in developed countries. Canada has been no exception. The Japanese believe their productivity and quality control are so well developed in Japan that they do not need to invest overseas to remain competitive and have taken advantage of a relatively free trade environment to effectively supply world markets from Japan. They would likely be content to continue doing so but fear protectionism in the U.S. and Europe and will therefore invest in those regions to preserve their shares of the market. The Canadian market alone is not regarded by the Japanese as large enough to justify the scale of production required, nor does production in Canada for foreign markets correspond to the Japanese rationale for investing overseas.

In the long term, Canada may be best served with specific Japanese investments in high technology manufacturing which could fill gaps in industrial capability or could launch Canada as a world source for a particular product. This 'world product mandating' approach makes the assumption that large Japanese multinational corporations would entrust the R&D, production and marketing of a specific product line in Canada for world markets, including even Japan. This remains to be demonstrated. Other products that such a company offered in Canada might be sourced from Japan or other plants worldwide.

There are opportunities for joint ventures between Canadian and Japanese firms to manufacture specifically for the Japanese market. This would apply to further processing of resource materials, as well as finished products such as: processed consumer food items, telecommunications equipment, auto parts, ocean industries equipment, consumer goods (furs, jewellery, sportswear/sporting goods) and industrial goods (health care products).

CANADIAN TRADE DEVELOPMENT INSTRUMENTS

1. General

Bilateral mechanisms, both government and private, as well as numerous trade promotional programs are in place between Japan and Canada. Government-sponsored promotional activities to date have focussed on manufactured or processed goods. Trade fairs and missions and the Canada Trade Centre have been the major vehicles. Information gathering and monitoring activities of the Federal and provincial governments are important, and other government activities, at both the federal and provincial levels, involve assisting with infrastructure and labour requirements for resource projects.

The Japanese are familiar with Canadian production capacity and supply capabilities in the resource sectors.

Although dealing with the Pacific region as a whole, the first Pacific Rim Opportunities Conference, chaired by the Minister of State for Trade in November 1980 in Vancouver and the second in February 1982 in Toronto, focussed attention on Japan as one of the major markets, and one of the major competitors for Canada, in the region. These conferences, and a series of seminars have done much to increase the awareness of the Canadian business community to opportunities in Japan.

A number of Canadian companies have offices or manufacturing facilities in Japan, and businessmen with a Canadian affiliation in Japan have joined to form the Canadian Chamber of Commerce in Japan. This organization, which evolved from a less formal businessmen's association, may gradually become a voice for Canadian business interests in Japan. At a more senior level, annual meetings of the Canada/Japan Business Co-operation Committee are held, the most recent in Sapporo, Japan in May 1982. The 1983 meeting will be held in Montreal. These conferences bring together senior level management from major companies involved in Canada-Japan trade from both the Canadian and Japanese sides. The four conferences held to date have done a great deal to identify areas where the two business communities can work more closely together.

In developing trade with Japan, Canadians have received assistance from Japanese organizations. The Japan External Trade Organization (JETRO) has, in the last five years or so, devoted increasing efforts to provide information to Canadian companies wishing to export to Japan. This has taken the form of publications, films and seminars on how to do business in Japan, and included a recent poll of several hundred Canadian companies to determine their export interests, the results of which were given to Japanese importers. The Canada/Japan Trade Council has taken an interest in educating and assisting Canadian exporters in the Japanese market. A number of seminar-type projects have been undertaken with these organizations in the past, and this type of co-operation will continue.

2. Financing

The provision of long-term export financing has been relatively unimportant in Canada-Japan trade, and this is likely to continue. To date financing has only entered into negotiations for the purchase of Canadian flight simulators, and was provided to cover that portion (aircraft wings for DC-9s) representing the Canadian content of a U.S. export order of aircraft to Japan. Certainly in recent years, with the discount rate in Japan below that in Canada and the United States, purchasers are attracted to Japanese commercial financing. In the most recent sale of a Canadian flight simulator to a major airline, the purchase was financed in Japan.

Competitive export financing could be a key factor in the success of Canadian companies participating in projects in third countries in co-operation with Japanese companies. Several Canadian and Japanese companies have already worked together in third countries. Canadian firms for example recently participated in Japanese led bids to supply thermal electric installations in Thailand and Indonesia. The Export Development Corporation has agreed to finance the Canadian portions of these projects and has indicated a willingness to do so for future projects. This financing can be arranged directly with the purchaser in the third country or with the Japanese prime contractor.

3. The Canada Trade Centre

In 1978, several Japanese business and government organizations (the Ministry of International Trade and Industry, the Japan External Trade Organization, the Manufactured Imports Promotion Organization (MIPRO), Keidanren, the Japan Chamber of Commerce and Industry, and the Japan Foreign Trade Council, Inc.), joined forces to create the World Import Mart in Tokyo as the focal point for Japan's official import promotion efforts. MIPRO

rented two complete floors of the office complex and has provided them free of charge to foreign governments for the sole purpose of promoting the import of manufactured goods to Japan.

The Canada Trade Centre (CTC), was established in January 1979, as the only such permanent showplace for Canadian products abroad. Although Japan is Canada's second largest trading partner, it buys the smallest volume and value of manufactured products of all Canada's trading partners. The CTC's purpose is therefore to promote Canadian manufactured products in the large Japanese market.

The CTC facility has a display area of 300 m^2 of flexible design, in the World Import Mart building in northwest Tokyo, near subway and railway stations. In addition to the modular display area, there is a meeting room which can seat 100 people. Managed by the Commercial Section of the Canadian Embassy in Tokyo, trade fairs are arranged at the CTC approximately once a month. Usually, 10 to 15 exhibitors in a specialized field participate in a single show. Solo shows can also be arranged to display large quantities of sample products or to conduct technical seminars in conjunction with a product display.

More than half of the CTC shows to date have featured high technology and industrial products, including: telecommunications, auto parts, processed foods, building materials, electronics, computer peripherals, electronic instrumentation, communication equipment, ocean technologies, pulp and paper equipment. In the consumer area, furs, floor coverings, food, jewellery, among other products, have been promoted by the CTC. In 1982 the CTC show program covers products in computer peripherals and electronic components, food, furs, carpets, books, magazines, photos, health care products, high technology security and defence equipment.

Canada enjoys a very favourable image in Japan as a large, beautiful country with wide-open spaces and friendly people. The CTC is designed to broaden Canada's image in Japan by showing our thriving industries, some of which lead the world in advanced technology. The CTC to date has helped to correct and balance the Japanese perceptions of Canada, and has helped to demonstrate our leadership in certain fields to the Japanese trade and industry in particular, and to Japanese consumers in general.

While the CTC lends itself to these sectoral shows it can also accommodate solo shows and seminars for both companies and industry associations. There are also several Canadian and Japanese publications, brochures, audio-visuals etc. which can assist businessmen in approaching the Japanese market. Provincial governments have their own fairs and missions programs in the manufactured products area. (A list of federal/provincial contacts is found in Appendix II, pp. 229-236).

Since January 1979, about 10,800 Japanese have visited the CTC site for the 30 group shows and the 20 solo shows from all sectors which have been held. More than 400 Canadian exhibitors have participated in these shows from all provinces, although the majority have been from Ontario, Quebec and British Columbia. Reported on-site sales at the CTC shows have been close to $9 million, and the reported follow-up sales (within 12 months of the show) have exceeded $100 million.

II. MARKET OPPORTUNITIES AND SECTOR MARKETING PLANS

List of Sectors and Tables in Part II

Note on statistics

Unless otherwise indicated the following conventions have been used in this paper:

- all values are given in current Canadian dollars
- all measurements are in metric terms
- numbers have been rounded off as indicated
- the conversion of yen to Canadian dollars was on the basis of the Bank of Canada average rate for 1981 of $1.00 Canadian = 183.48623 yen.

Statistics are provided on the basis of the latest information available at the time of printing.

PRIORITY SECTOR IDENTIFICATION AND SECTOR MARKETING PLANS

An analysis of the characteristics of the Japanese market and the pattern of Canada/Japan trade, has indicated a number of sectors in which significant trade has traditionally occurred and is likely to continue, and a number of sectors with good growth prospects over the next several years. The matching of areas of Japanese demand and Canadian supply capabilities was undertaken by the Commercial Division of the Canadian Embassy in Japan, the Office of Pacific and Asian Affairs, and all Industry Sector Branches. These inputs resulted in the identification of sectors in which trade prospects were significant and the potential payoff to Canada was high. The volume and diversity of Canada-Japan trade dictated the consideration of a great number of priority sectors. It was recognized that a different type of government involvement is required in the promotion of exports in the resource sectors from that required in the fully manufactured product areas.

Although not all-inclusive, the following list of priority sectors and their sub-sectors represents major areas of opportunity for Canadian exporters in Japan. Functionally, the sectors are listed in the order of their description in this report, rather than in their order of importance:

- Forest products (primary wood, manufactured wood, pulp and paper)
- Petrochemicals
- Nuclear reactors and uranium
- Electronics (telecommunications, computer peripherals)
- Agriculture and food products (cereal, grains and products; oilseeds and oilseed products; fish products; livestock, meat, cheese and processed food and beverage products; dehydrated alfalfa, forage seeds and peat moss)
- Marine industries (ocean industries, ship component parts and ship repair)
- Automotive parts
- Coal
- Non-ferrous metals and minerals (copper, lead, zinc, ferro-silicon, aluminum, molybdenum)
- Manufactured products - (1) Consumer goods (furs, sporting goods/sportswear, jewellery, floor coverings); (2) Industrial goods (health care products, instrumentation, aerospace).

1. FOREST PRODUCTS

1a. Overview

The Opportunity

Japan's large population, rapid economic growth and strong industrial base have created the largest demand for forest products of any country except the U.S. In 1980, total product consumption in wood-fibre-equivalent exceeded 100 million cubic metres.

Japan supplies about one-third of its total wood fibre requirements from domestic forests; this includes 50 per cent of its demand for softwood logs. Since 1975, the actual timber harvest has declined substantially in the face of an overall increase in product demand. With this large deficit in wood fibre, forest management activity in Japan has been intensified, to increase the allowable harvest on a sustained basis. According to the Basic Plan on Forest Resources, published in 1980, the annual cut will increase from the current level of 40 million cubic metres ($m3$) to about 50 million, 60 million, and 90 million m^3 respectively in the years 1990, 2000 and 2030. Based on these forest production estimates, and Japanese consumption demand projections, import requirements of wood-fibre-equivalent are forecast to increase by about 15 per cent over the next 15 years. Changes in import composition, i.e. less round-wood and more lumber and pulp, are also foreseen.

The Japanese forest product industry relies heavily on the import of its raw materials in the form of logs and chips. Logs are supplied primarily from southeast Asia, (mostly Malaysia and Indonesia), northwestern U.S. and the U.S.S.R. The first two together supply about 40 per cent of total Japanese requirements and are under increasing pressure to reduce log exports. In the future, as supply countries restrict basic raw material exports, Japan will, of necessity, increase its imports of processed product. This would in turn impact most heavily on the lumber sectors of foreign product supplying countries, including those which had previously exported logs.

The demand for market pulp is expected to increase, since more than 90 per cent of the fibre supply of the Japanese pulp industry is in the form of domestic or imported wood chips from saw mills and plywood mills, rather than from round wood.

Table 1:

Japanese Forest Industry Production and Consumption, 1979

	Production	Consumption	% Self-sufficiency
Softwood lumber*	30.7	35.4	87
Plywood*	8.4	8.3	100
Other wood-based panels*	1.8	1.8	100
Sub-total	40.9	45.5	90
Wood pulp**	10.0	11.6	86
Newsprint**	2.6	2.5	100
Other paper and board**	15.3	15.2	100
Sub-total	27.9	29.3	95

Legend:
* lumber, plywood, panels in million cubic metres (m^3)
** pulp, newsprint, paper in million metric tonnes (M/T)

The Japanese pulp and paper industry has generally modern facilities. In the past, Japan has been a net exporter of paper/paperboard products, and its production exceeds that of Canada, imports rose sharply in 1982. Sawmills, for the most part, are small and scattered, but industry rationalization and automation are notable current trends. The plywood industry, which utilizes hardwoods, is large and modern, having grown rapidly over the last three decades. In recent years, the industry has had serious overcapacity problems due to a declining housing market and difficulties with the supply and price of hardwood feedstocks. Consequently several bankruptcies have occurred.

Factors which are likely to affect Japanese production trends and import requirements are: the increasing cost of imported energy for the energy-intensive pulp and paper industry, pollution problems, and the results of Japanese efforts to invest abroad to secure fibre and product suppliers.

Canadian Supply Capability

Canada restricts roundwood (logs, plywood) and wood chip exports to those surplus to Canadian requirements. Japan has nevertheless become a major market for Canadian lumber and pulp, and a minor market for Canadian paper and other

wood products. During the last five years, total forest product exports to Japan have shown an annual increase of 32 per cent, as shown in Table 2.

Table 2:

Canadian Exports of Forest Products to Japan, 1975 and 1980

	1975 ($ Million)*	1980 ($ Million)	Percentage of annual growth
Wood products			
Logs	17.0	46.2	22
Wood Chips	-	43.3	**
Lumber	89.3	504.7	42
Plywood	0.2	5.8	96
Mfd. Wood Products	0.2	0.8	32
Sub-total	106.7	600.8	41
Pulp and paper			
Pulp	151.8	457.6	25
Newsprint	1.9	9.3	37
Others	8.2(1)	33.2(2)	32
Sub-total	161.9	500.1	25
Total forest products	$268.6	$1,101.0	32

Legend: * current dollars
** growth rate undefined
(1) $6.9 million is wrapping paper
(2) $16.9 million is linerboard and $15.8 million is wrapping paper

Canada is Japan's most significant foreign supplier of forest products other than logs and chips. Canadian lumber and pulp represent about 45 per cent of total Japanese imports for these products. Potential shifts in international trade with respect to log imports into Japan could have serious implications for Canada, as available wood surpluses become increasingly scarce. Log exports to Japan from the United States in 1980, for example, were about U.S.$1.3 billion, which is roughly equivalent to three times the value of Canada's lumber exports to Japan.

Forest Product Trade Development and Major Opportunities

Canadian market development activities in Japan have concentrated on the promotion of timber frame construction, lumber and plywood. These activities have been supported to a considerable extent by the Co-operative Overseas Market Development Program (COMDP); which was cost-shared by ITC, the Council of Forest Industries of British Columbia (COFI) and the Province of British Columbia. Since 1975, lumber exports to Japan have increased by 42 per cent per year, and passed $500 million in 1980. In 1981 however, lumber exports declined to $365 million, reflecting the lower level of housing construction in Japan. The Federal Government continues to seek reductions in tariff and non-tariff barriers in order to increase access to Japan for Canadian lumber, plywood, paper and further manufactured forest products.

On balance, there are major opportunities for increased Canadian forest product exports to Japan, especially for B.C. producers who have the most favourable geographic access.

Primary wood: There is potential for continuing growth in Canadian lumber sales, despite cyclical market conditions. Promotional activities and related bilateral discussions of tariff and non-tariff barriers, in support of the major sales and marketing efforts of industry will be continued. While the potential for Canadian plywood is affected by Japanese over-capacity, efforts to gain acceptance of Canadian standards and to reduce the tariff will be pursued. The potential for the export of surplus pulp chips to Japan is expected to be good.

Manufactured wood products: Market exploration, supported by PEMD, and specific promotional activities such as trade fairs and missions, will assist Canadian suppliers to develop markets over the longer term. While existing constraints appear to limit large volume shipments to Japan, a steady growth in market penetration would support governmental objectives of increasing the level of processing before export.

Pulp and paper products: Increased exports of pulp are likely to be sustained in the intermediate term. Longer term possibilities exist for paper grades such as newsprint and groundwood specialties. Government support of industry liaison activities with Japanese authorities on market requirements should be continued, and perhaps increased to complement company sales and marketing activity. The Federal Government can facilitate the discussion of issues

and opportunities in joint government/industry committees, and make information available to the industry sector on developing trends.

1b. Primary Wood Products

The Opportunity

Japan has a well-developed wood product industry with approximately 22,000 operating sawmills, most of which are small, having fewer than nine employees, and 700 plywood and veneer mills (medium-sized, average 79 employees). Japan has to import 60 to 70 per cent of its timber requirements. Its three main foreign timber sources are: Southeast Asia, North America and U.S.S.R., respectively providing 50, 30 and 20 per cent of total imports. Approximately 99 per cent of the southeast Asian and Russian timber, and approximately 80 per cent of the North American timber, is imported in the form of logs. While the import of logs increased by 5 per cent in 1979, and then dropped in 1980 to its lowest level since 1975, there was a 33 per cent increase in sawn timber imports in 1979, and a further 9 per cent increase in 1980. Similar trends were observed for wood chips, plywood and veneers.

During 1979 approximately 41 million cubic metres (17 billion board feet) of lumber were consumed in Japan. Housing accounted for 31 million cubic metres, followed by industrial packaging and furniture, each with about 3 million cubic metres. Softwood lumber imports during 1979 reached 4.7 million cubic metres, up from about 3.4 million cubic metres in 1978.

During the 1970s, the number of housing starts ranged between 1.1 and 1.7 million, with the proportion of wood housing units falling from about 70 per cent to a little over 60 per cent by 1980. The volume of lumber consumed per unit of floor space declined, even though the floor space per housing unit increased. The number of housing starts in the 1980s is expected to range between 1.2 and 1.7 million. Although the average size of a wooden house is expected to continue to increase over the next 20 years, the volume of wood used per metre of floor space, and the proportion of wood-constructed houses are forecast to decline.

Lumber consumption for repairs and alterations has declined steadily, from 12 million cubic metres in 1966 to 5 million in 1979. This market is expected to stabilize at that level through the 1980s. Consumption of lumber, mainly hardwoods, by industrial markets (i.e., civil engineering, packaging, furniture) is expected to stabilize at about 9 million cubic

metres. Softwood lumber consumption in all uses (mainly construction) is forecast to fall by the year 2000 to about 23 million cubic metres, from a level of 29 million during the 1970s. Hardwood lumber consumption is similarly forecast to decline by 10 per cent from current levels to 9 million cubic metres by the year 2000.

Japan has the second largest plywood industry in the world, and is virtually self-sufficient. In 1979, 390 plywood plants produced about 1.9 billion square metres of product, about 95 per cent of which came from tropical timbers, mainly lauan, imported from Malaysia, the Philippines and Indonesia.

The Canadian Industry

The primary wood products manufacturing sector converts roundwood (logs) by mechanical means (namely, sawing, peeling, slicing, chipping, milling) into lumber, wood chips and other residual bi-products, and produces veneers, plywood, particle board, other wood-based panels and a range of minor wood products. The total value of exports in 1980 was approximately $5 billion, with lumber exports accounting for two-thirds of that total. The industry is established across Canada, and provides employment for more than 70,000 workers.

The softwood lumber industry is composed of 1,000 manufacturing facilities, of significant size, employing about 60,000 workers. In 1981, 39 million cubic metres (16.4 billion board feet) were produced, of which 70 per cent was exported. Japan is Canada's second largest export market, with shipments of about 2.0 million cubic metres (down from 2.6 million cubic metres in 1980), mostly from British Columbia. Canada provided 46 per cent of Japan's imported lumber requirements in 1980.

The Canadian softwood plywood industry operates 31 mills and employs about 8,600 workers (90 per cent of whom are employed in B.C.). In 1981, about 2.1 million cubic metres (2.4 billion square feet on a 3/8" basis) of softwood plywood was produced. Exports to Japan rose from 7.3 thousand cubic metres in 1979 to 26.2 thousand cubic metres in 1980 and fell to 18.0 thousand cubic metres in 1981.

During 1981, exports of surplus logs and chips to Japan amounted to 309,000 cubic metres (valued at $37 million) and 423,000 tonnes (valued at $43 million), respectively.

Canadian Marketing Activity

Canada's involvement in the forest products trade with Japan began in earnest following World War II. The restrictions on exporting logs from the Province of British Columbia forced forest products companies there to develop trade in Douglas fir, hemlock and cedar, cut to large squares (18"x18"), medium squares (12"x12"), and baby squares (4"x4"). Also included in this trade were custom-cut items specifically requested by Japanese lumber dealers. Several west coast mills are currently designed to produce lumber only to Japanese specifications.

In the early 1970s, the Council of Forest Industries of British Columbia (COFI), and the former Department of Industry, Trade and Commerce (ITC) worked closely with the Japanese Ministry of Construction (MOC) to develop a special building code for the platform frame construction system (PFC). In 1974, COFI staff together with the Ministry of Agriculture, Fisheries and Forests (MOAFF) developed a lumber standard and obtained Japanese approval for the use of dimension lumber in the construction of PFC houses in Japan. The COFI Tokyo office works with Japanese industry and housing authorities to speed the acceptance of the PFC method, thus creating a demand for dimension lumber. Sales have grown from virtually zero in 1974 to more than 269,000m^3 from COFI member mills alone in 1980. This represented about 2 per cent of Japanese total housing starts in 1980, or about 15,000 units. The Japanese Housing Loan Corporation and the Japan PFC Home Builders Association predict that PFC starts will reach 10 per cent of wooden houses, or about 100,000 units within five years.

In 1981 ITC and the Province of British Columbia agreed to renew participation with COFI in a third five-year extension of the Co-operative Overseas Market Development Program (COMDP) to 1986. The objective of COMDP, for Japan in particular, is the identification and development of new markets for Canadian wood, such as cedar products and plywood for concrete forming. As the PFC system and its promotion has become largely self-sustaining, resources have been progressively reallocated to deal with particular issues, such as the current specification problems for lumber, the spruce/pine/fir (SPF) tariff, and certain building code restrictions. Field projects, including technical seminars at regional locations, meetings with builders, the provision of technical support at housing fairs, an advertising program, and a detailed study on the uses and opportunities for western red cedar in Japan are among the current COMDP activities. The COMDP advertising program featured a new leaflet on hemlock, two major releases on western red cedar, and continued publicity on PFC.

A series of Japanese technical missions, the most recent in July and October 1981, have visited Canada to familiarize Japanese government officials and private company executives with the platform frame construction technique. In-depth theoretical and practical discussions are tied in with visits to construction sites and model homes to present an overall view of the Canadian residential construction scene. Included in the visits program is a close study of the basic materials of platform frame construction - lumber and plywood - to properly illustrate North American building practices.

The Canada-Japan Housing Committee, established in 1973, provides a senior level forum for the exchange of ideas leading to better knowledge and more rapid acceptance of platform frame construction in Japan. The Canadian delegation is sponsored by the Department of Industry, Trade and Commerce and headed by the President of Canada Mortgage and Housing Corporation (CMHC). Following the last meeting of this Committee in June 1981, three Canadian housing specialists, represented by CMHC, the Housing and Urban Development Association of Canada (HUDAC) and the Division of Building Research of the National Research Council of Canada, presented a series of seminars with Japanese builders and housing officials throughout Japan on the technical aspects of the Canadian platform frame construction technique.

A PFC design manual will be prepared and endorsed by either the Japanese Ministry of Construction or the Housing Loan Corporation. Similarly, a textbook on PFC will be produced for use at Japanese vocational schools. A 20-minute video tape presentation stressing the advantages of PFC relative to fire and seismic resistance, energy conservation, etc., will be prepared for consumers. Literature will also be prepared on the non-housing uses of plywood.

Several Canadian lumber manufacturers/shippers maintain offices in Japan. They include MacMillan Bloedel (Macmillan Jardine Japan) Ltd., Seaboard Timber & Plywood Asia Ltd., the East Asiatic Co. Ltd. (EACOM), and Northwood Mills Ltd. Each of these develops and executes active sales campaigns and each is in constant touch with Japanese market trends.

Canadian Success Stories

COFI, through its office in Japan, maintains a high profile in the Japanese lumber industry, which gives B.C. products excellent credibility with Japanese purchasers. This, coupled with the recognized high quality of Canadian sawn lumber in general, gives the Canadian product a distinct advantage over others in the Japanese market.

The introduction of PFC housing has been a central element in the overall program and one of the important Canadian successes in Japan in recent years. Under special permit, Douglas fir plywood (DFP) has been allowed into the Japanese market for use in PFC housing. In itself, PFC is a positive example of close co-operation between Canadian governments and industry, and of the importance of following a well-funded, long-term approach.

Market Considerations

Although Canadian penetration of the Japanese primary wood products market has been considerable, major impediments for Canadian exports to Japan still exist in the form of a 10-per cent duty on dressed SPF lumber, and a 15-per cent duty on softwood plywood. The Japan Agricultural Standard (JAS) for construction grade plywood, developed originally for hardwoods, is inappropriate for softwood plywoods.

Efforts will be needed to encourage changes in the JAS to allow unrestricted imports of softwood plywood for structural use. If progress is to be made, the Japanese must be encouraged to recognize their own interest in the elimination of the tariffs. Seminars for Japanese sawmillers and/or missions to Canada to become familiar with Canadian capabilities would increase the knowledge of private sector groups of the role of Canadian lumber and Canadian log export policies.

Canadian grading standards for dimensional lumber are not recognized by the Japanese, the product therefore must be re-inspected on arrival in Japan. Certain anomalies in the Japanese building code for platform frame construction, if removed, would improve the economics of PFC construction in Japan. (The Japanese code was changed in January 1982 to allow two-and-one-half-storey townhouses; three-storey wood frame construction, and stud spacing equal to that in Canada are not yet approved.) These issues are currently being pursued by the Federal Government, bilaterally with the Japanese government, and by the Canadian private sector with its Japanese counterpart.

Competition and Competitor Activity

For softwoods, Canada's primary competition comes from the U.S., the U.S.S.R. and New Zealand. Almost all of Japan's hardwoods are imported from southeast Asia (Indonesia, Malaysia, the Philippines). Canada's relative position as primary wood product exporter to Japan can be seen from the following table.

Table 3:

Japanese Imports of Primary Wood Products, 1981

	Lumber		Logs		Veneer		Plywood	
	Volume*	%Mkt.	Volume*	%Mkt.	Volume**	%Mkt.	Volume**	%Mkt.
Canada	1,823	46.8	323	1.1	225	0.7	1,705	33.6
U.S.	1,131	29.0	7,412	25.4	707	2.5	504	9.9
U.S.S.R.	123	3.1	5,647	19.3	-	-	-	-
New Zealand	258	6.7	497	1.7	-	-	-	-
Malaysia	112	2.8	8,370	28.7	7,585	26.5	527	10.4
Indonesia	123	3.1	4,507	15.4	11,104	38.8	1,595	31.4
Philippines	128	3.3	1,467	5.0	4,047	14.2	17	0.3
Others	203	5.2	996	3.4	4,945	17.3	732	14.4
Total	3,901		29,219		28,613		5,080	

Legend: * logs and lumber in 1000 m^3
** plywood and veneer in 1000 m^2

Source: Japan Lumber Journal, May 5, 1982.

Although Canada is Japan's smallest supplier of logs, it is at the same time its single largest supplier of sawn lumber (46 per cent of market). While Canada's market share is growing, increased competition for softwood lumber can be expected from the United States. In 1979, for example, the U.S./Japan Lumber Promotion Committee was established on an industry-to-industry basis, to study methods whereby U.S. lumber manufacturers could sell more sawn lumber to Japan.

The Action Plan[1] **(For contacts see Appendix II)**

The continuation of support for the Council of Forest Industries (COFI) and the Co-operative Overseas Market Development Program (COMDP) is central to the Canadian market development strategy for the forestry sector in Japan. In addition to the wide range of promotional activity under COMDP, the Federal Government will undertake the following activities:

i) Continue to expand exchanges between government and private sector bodies in Japan and Canada through the Canada-Japan Housing Committee Meetings. **(Post/RIB)**

ii) Encourage development of the PFC system in the outlying regions of Japan by studying alternative methods (such as the establishment of dimension lumber depots) of supplying readily available competitively-priced dimension lumber. **(Post)**

1 Unless otherwise indicated the activity/event is considered to be ongoing.

iii) Establish as of 1982/1983, annual missions to Canada involving architects, framers and builders to encourage expanded PFC activity. **(Post/DOJ/RIB)**

iv) Develop markets outside PFC construction for CLS lumber, e.g. in packaging, traditional Japanese moulding, and post and beam construction, furniture, etc. **(Post/RIB)**

v) Ensure that Canada's established position in the sawn lumber market is maintained, as pressure mounts for Japan to purchase larger quantities of manufactured lumber in lieu of logs. **(Post)**

vi) Press for changes in Japanese building codes, the Japan Agricultural Standard for plywood and timber inspection. Softwood plywood missions, individual visits, seminars and technical presentations in Canada will be part of the ongoing market development activities for this sub-sector. **(Post)**

vii) Consider the formation of a bilateral Canada-Japan committee to discuss lumber trade. The committee could be a private sector venture with or without government representation. Its objective would be to study in detail supply and market trends, to promote greater stability in the trading relationship, and to identify steps that could further develop trade and mutually beneficial investment and technology exchanges.

(Post/RIB)

For further information on primary wood products contact the Resource Industries Branch, DRIE (see p. 234)

1c. Manufactured Wood Products

The Opportunity

The Japanese consumer has a high regard for wood and for finished wood items. This is a traditional preference and Japanese consumers demand products of high quality, uniform colour and uniform grain characteristics without defects. White woods are often preferred, although products that have unique characteristics (for example, those made of western red cedar) are more readily accepted.

To date, programs to promote Canadian wood platform frame housing in Japan primarily for increased exports of Canadian construction grade lumber and plywood, have also established a base for the wider promotion of Canadian housing-related manufactured wood products. There is a potential market in Japan for the following products:

- kitchen cabinets and doors
- manufactured homes, particularly log houses using western red cedar
- hardwood flooring
- panelling, particularly of western red cedar
- laminated lumber products, particularly of western red cedar
- interior and exterior doors
- rough sawn western red cedar fencing, railings
- wood mouldings
- wood window components
- wood components for musical instruments.

Realistically, the export potential for manufactured wood products, and increased sales of hardwoods for furniture manufacturers does not compare to the volume potential for lumber and pulp. However, taking into account the traditional Japanese position on importation of further processed goods, a stable and growing Japanese economy could still provide Canadian manufacturers of wood products with a significant new market.

The relatively small size of domestic companies in Canada, and the declining prospects in the Canadian market, reinforce the significance of the Japanese market. An export thrust by this sector would be consistent with government objectives aimed at increasing the level of processing before export, and would also increase resource utilization and raise regional employment levels. In most cases, manufactured wood products have substantially higher value-added, and generate considerably more employment per unit of wood than primary wood products. A target of $20 million annual sales by 1990 would seem a realistic expectation for the export of Canadian manufactured wood products to Japan. This target represents a miniscule portion of the total Japanese market. The achievement of that level of market penetration depends largely on a sustained marketing effort by Canadian companies.

To take advantage of present and future opportunities, Canadian producers will have to meet specific Japanese dimension and quality requirements, maintain a consistent supply, and provide the requested product documentation. In many cases, the shipment of production line North American units will not interest Japanese buyers.

The do-it-yourself outlets in Japan offer one of the more promising methods of increasing Canadian manufactured wood product sales. Although such products cover only a portion of the total market, they do present the opportunity to introduce new and innovative items with direct consumer appeal. Japan has a well established Do-it-Yourself Association, and members travel frequently to the United States for major trade shows. In addition to manufactured wood products, this market may provide sales opportunities for such products as carpentry tools, locks and other hardware.

The Canadian Industry

The manufactured wood products sector is characterized by a diverse product mix. The main components of the industry are: millwork (including windows and doors), kitchen cabinets and manufactured buildings (including housing). For the three major components, there are approximately 1,200 establishments with 29,000 employees (an average of less than 24 employees per establishment), which is indicative of the small and non-integrated nature of the industry. The highest firm concentrations are in Ontario and Quebec (316 and 437 establishments respectively), but there are companies located in all provinces.

The companies which form the millwork and other manufactured wood product industry are almost completely Canadian-owned and privately held. In general, the larger firms are able to keep abreast of technological improvements provided by machinery and equipment suppliers. A number of companies have participated in the innovation and productivity study support provisions of ITC's Enterprise Development Program.

In 1980, total industry shipments reached approximately $1.4 billion. While this is less than 10 per cent of the total forest product industry's shipments, it nonetheless has a significant impact on regional employment levels and the economic well-being of many small communities. Exports accounted for 30 per cent of 1980 shipments, or about $400 million. (This figure includes about $150 million of manufactured buildings, mostly industrial camps in the Middle East and North Africa.)

While there have been significant exports to the United States, there is limited offshore export experience in the manufactured wood product industry outside of the manufactured buildings sub-sector. This is partially due to the small, scattered nature of the industry, and also to the concentration historically of firms on domestic market prospects within a limited geographic range of their manufacturing facility.

Overall, the industry sector is closely linked to housing activity. When housing starts decline, the effects are felt throughout the millwork and manufactured building industries. Meaningful production forecasts are difficult to obtain and are complicated by the inability to quantify the impact on the sector, of the rapidly growing renovation, remodelling and do-it-yourself markets, not only in Canada, but in other industrialized countries.

Canadian Marketing Activity

Although in recent years Canadian exports of manufactured wood products to Japan have seldom exceeded $2 million (i.e. one-half of 1 per cent of total industry sector export shipments), several British Columbia companies have made considerable effort to penetrate the Japanese market for their products, and have achieved results that are significant in terms of their overall sales levels. Examples include the sale of manufactured log houses in western red cedar, kitchen cabinets and laminated rafters. In the first two cases, ITC provided considerable assistance in supporting the companies' efforts. On a less sustained basis, Canadian companies have also sold luxury manufactured houses and exterior doors.

Despite the historically low export sales volume, (see Table 4 below) longer term opportunities are foreseen for select categories of Canadian manufactured wood products.

Table 4:

Canadian Manufactured Wood Product Exports to Japan, 1980

		Percentage of exports
Millwork	$ 177,000	13.0
Kitchen Cabinets	374,000	27.5
Manufactured Buildings	808,000	59.5
Total	$1,359,000	100.0%

In the fall of 1978, an ITC-sponsored mission of Canadian manufacturers of homes and industrial camps explored market opportunities in Japan. While the bulk of follow-up sales were made to large Japanese construction companies involved in development projects in third countries, several small orders of luxury homes were shipped directly to Japan.

ITC support for exports in this sector has generally been limited to those firms which are well-established in the domestic market, and which have the appropriate management strength and financial resources to pursue export markets.

Incoming technical missions and the Canada-Japan Housing Committee, as previously described, play an important role in the ongoing program to gain acceptance for the wood platform frame construction technique, Canadian building and material standards and/or the basic forest products utilized in residential construction. This effort is jointly supported by federal and provincial levels of government, as well as those industry sectors directly involved with marketing initiatives in Japan.

Market Considerations

The Japanese consumer has a distinct preference for wood and wood products, and since such wood species as western hemlock, western red cedar and eastern maple are not indigenous to Japan, Canada, with its available supply of these species, is placed in a favourable market position. Opportunities for the sale of aspen poplar from Canada could increase in the future, to take advantage of them would require related product and market development efforts. The Japanese market for manufactured products is vast, thus an initial sale of these products by Canada would likely be sustained, providing greater opportunities for growth, at lower risk, than in other markets. Sound relations between Canada and Japan have been established through such other forest products thrusts as the Canada-Japan Housing Committee and timber frame promotion. Reasonable freight costs from the western coast, and advantageous labour costs from hardwood-producing eastern regions, place Canada in a favourable position to access the Japanese market.

Japanese manufacturing capabilities are strong and the industry is diverse. Major opportunities for Canadian companies therefore exist in a limited range of product categories with characteristics and standards modified to the Japanese market. The Canadian manufactured wood products industry tends to be domestically-oriented and generally without the knowledge, or resources, to pursue and develop the Japanese market on a sustained basis in the face of a complex distribution system and a Japanese lack of familarity with Canadian capabilities.

Tariffs on manufactured wood products range between 2.5 per cent for wood flooring and 20 per cent for wood laminates.

Competition and Competitor Activity

Other countries have been unsuccessful in penetrating the Japanese market for manufactured wood products, and their related promotional activities have been negligible.

The Action Plan (For contacts see Appendix II)

It is in the Canadian interest for the Federal Government to assess product opportunities in Japan in this sector, and to support those companies that are most interested and have the resources to sustain market development activities in Japan. In the medium term, the most effective vehicle for the manufactured wood product sector will be trade fair participation and incoming missions, either full scale or smaller incoming buyers' groups. Selective support through the PEMD program is available. To pursue these opportunities the following activities[1] are planned:

i) Market identification work, including detailed market surveys and assessments of such promotional vehicles as the annual Japan Do-It-Yourself (DIY) Show held each September, undertaken by Post officials in Japan. **(Post)**

ii) Participation with COFI in a manufactured wood product show and a Canadian cedar product show in 1983-1984. **(RIB)**

iii) A series of visits, under the Incoming Visitors Program by officials of the Japanese building materials trade, contractors, DIY retailers, architects and other influential industry people. **(Post/DOJ/RIB)**

iv) Encouragement to Japanese buyers to attend Canadian trade fairs. **(Post/RIB)**

v) The continuation of a concerted follow-up program by the Resource Industries Branch and the Post with Canadian firms already active in the Japanese market and with the potential to follow-through. **(RIB/Post)**

For further information on manufactured wood products contact the Resource Industries Branch, DRIE (See p. 234)

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1 Unless otherwise indicated the activity/event is considered to be ongoing.

1d. Pulp and Paper Products

The Opportunity

Japan is the second largest paper and paperboard manufacturer in the world, and uses a combination of domestic (51 per cent), imported (8 per cent), and recycled (41 per cent) pulps to produce a wide range of papers and boards. In 1979, out of a total consumption of 17.7 million metric tonnes of newsprint, paper and board, less than one-half million tonnes were imported. The imports were mainly the low value, high-energy consuming grades, such as kraft packaging (linerboard and newsprint). However, with drastically rising costs, Japanese manufacturers are more seriously considering the production of finished products abroad for import to Japan. This trend became evident in 1980 paper imports, and long range forecasts predict that it will continue.

According to the Provisional Forecast of Paper Demand/Supply Relations, compiled by the Industrial Structure Council (ISC) for MITI, foreign-produced paper and paperboard utilized in the Japanese market is expected to equal 7 per cent of the total demand by 1990, reaching 1.9 million tonnes. This prediction is based on a 3.5 per cent annual average growth rate in paper demand. Total demand is expected to reach 25.6 million tonnes by 1990, a 40 per cent increase over 1979. According to the ISC report, the grades that will share most of the imports by 1990 are newsprint, with 22 per cent, followed by wrapping papers, 11 per cent. Imported newsprint is likely to reach 800,000 tonnes by 1990, over 700,000 tonnes of which will be supplied from Japanese ventures in the U.S., New Zealand and Canada. Demand for mechanical printing papers will continue to grow more than wood-free grades, in line with cost reduction programs by various publishers.

The Canadian Industry

The Canadian pulp and paper industry includes about 70 companies with more than 152 manufacturing establishments, employing 140,000 persons in woodlands and mill operations. Nearly 50 per cent of the manufacturing capacity is located in cities and towns with populations of less than 100,000. The industry is not homogenous. It consists of the following sub-sectors, each with somewhat different characteristics and problems: market pulp, newsprint, printing and fine papers, bulk packaging and miscellaneous papers. Of these, newsprint and market pulp are the two most important sub-sectors. Historically, they have been internationally-oriented; the other sub-sectors are essentially domestic-oriented.

In 1980, total shipments of pulp, newsprint, paper and paperboard were valued at $10.8 billion, and approximately 16.3 million metric tonnes (approximately 80 per cent or $8.5 billion of the total value) was exported. The primary market for pulp and newsprint has traditionally been the U.S., followed by Japan and the EEC. Over the past decade the pulp and paper industry's exports represented about 12 per cent of total Canadian exports of all commodities.

In British Columbia, the industry concentrates on market pulp, with some emphasis on newsprint (15 per cent of total Canadian capacity). Eastern Canada, on the other hand, covers a wider range of products, with only minor emphasis on market pulp, and a major commitment to newsprint (85 per cent of total Canadian capacity). Additionally, 95 per cent of the fine paper industry is located in eastern Canada along with the major portions of the bulk packaging and miscellaneous papers sub-sectors.

Ownership patterns vary substantially from region to region and between the industry sub-sectors. There are strong Canadian companies in British Columbia, but there are also significant foreign investments by American, European and Japanese companies. Ownership of the fine paper and bulk packaging sub-sectors is almost completely Canadian. In the newsprint sub-sector, Canadian interests control 72 per cent of capacity, the balance is shared by U.S., British and Scandinavian companies.

There is one Japanese-Canadian joint venture in Canada located in Dalhousie, New Brunswick which produces newsprint/groundwood grades. There are, however, five Japanese companies with equity in B.C. pulp production. The potential for further Japanese investment in Canada in this sector will remain high as long as fibre sourcing and production of pulp and paper in Canada remains competitive on the world market.

Marketing Canadian Pulp and Paper in Japan

Table 5:

Canadian Pulp and Paper Exports to Japan: 1970-1981

($ million)

	1970	1975	1980	1981
Total pulp	70.2	151.8	457.6	388.2
Newsprint	11.2	1.9	9.3	17.5
Other paper and board	.5	8.2	33.2	25.6
Total	81.9	161.9	500.2	431.3

Source: Statistics Canada

Canada has been Japan's largest supplier of pulp (44 per cent of imports of market pulp) for a number of years. This situation is likely to continue, but Canada's share of total imports will fluctuate in direct relation to the strength of the American economy and the amount of market pulp available from integrated U.S. pulp and paper companies. Canada is usually Japan's largest supplier of a variety of kraft papers and boards. On occasion, depending on weak domestic markets, the United States or a Scandinavian country have become Japan's leading supplier for a year or two.

It is expected that the volume of specific lower-value grades of paper from Canada will continue to increase as Japan shuts down its efficient, polluting, high-energy consuming mills and becomes more dependent upon imported commodity grades of "brown" papers and boards. This is dependent, of course, on sufficient wood fibre and required paper grades being available in Canada. Market prospects for higher-value cultural or white papers from Canada are not encouraging. The Japanese paper industry, which can supply most of its domestic needs, is protected by relatively high tariff and non-tariff barriers, and has a complex distribution system that is difficult to penetrate.

Market Considerations

As a result of the recent MTN, Japanese tariffs on wood pulp, newsprint and kraft paper were reduced and bound (wood pulp is already duty-free on a temporary unbound basis). The Japanese tariffs on newsprint and on kraft paper will be reduced from 5.5 to 3.9 per cent, and from 17 to 15 per cent respectively. These tariff reductions, together with increasingly higher production costs in Japan, will enhance the attractiveness of importing these more highly finished paper products.

In the future Canada's position as major pulp and paper supplier to Japan will depend a great deal on the efforts of the Japanese Government to increase the consumption of waste paper in domestic mills, and its success in obtaining woodchips through long-term overseas contracts, or through joint-venture activities abroad.

Competition and Competitor Activity

Canada has the largest market share (44 per cent), United States, Sweden and New Zealand are the most active competitors with a combined 49 per cent share and another 6-8 countries supply the remaining 7 per cent.

The promotional efforts of the approximately 12 major pulp and paper suppliers to the Japanese market vary in intensity

from year to year. United States exporters are currently active, but with future improvements in the U.S. economy and a strong dollar, U.S. exports to Japan are expected to decline. A similar situation exists with respect to efforts by the Scandinavian companies. Sustained competition in the market pulp field can be expected to come from the New Zealand forest industry, where pulp sales to Japan over the past decade increased from 2,000 tonnes to over 230,000 tonnes.

The Action Plan[1] (For contacts see Appendix II)

Japan is a well-known market to most of the major pulp and paper manufacturers in Canada. The western Canadian mills have been dealing with Japanese firms for many years, and the Japanese have had investment in western mills since the 1960s. Eastern Canadian mills, because they are more highly integrated in pulp and paper products than western mills, and are more dependent on the domestic and U.S. markets for newsprint and pulp, have traditionally invested less in trade promotion in Japan. In addition to the normal monitoring and market intelligence activities of the Resource Industries Branch and the Commercial Division of the Canadian Embassy in Japan, the Federal Government will support and encourage the following activities:

i) Plans of the Canadian Pulp and Paper Association which has formed close links with the Japan Paper Association to have top level discussions in Canada and Japan every 18 months to discuss common problems and opportunities, and to exchange statistical information. **(Post/RIB)**

ii) Ongoing exchanges between the Pulp and Paper Research Institute of Canada and the Japan Pulp and Paper Research Institute with the encouragement of the Federal Government and of provincial governments, most notably British Columbia. **(Post/RIB)**

iii) Review of market developments with the industry to determine how high-value papers, boards and paper products might be better traded in Japan, given the longer term potential for newsprint and higher grade paper exports. **(Post/RIB)**

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1 Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on pulp and paper products contact the Resource Industries Branch, DRIE (See page 234).

2. PETROCHEMICALS

The Opportunity

The Japanese petrochemical industry is in a difficult period, which has resulted from a heavy dependence on high cost imported naphtha feedstocks. Until recently, Japan was virtually self-sufficient and a significant exporter of petrochemicals. The Japanese petrochemical industry is made up of the industrial groups (which include major trading companies) and the oil companies. Individual petrochemical facilities are old and not generally world-scale in production capacity. Long before the 1973 OPEC oil embargo revealed Japan's vulnerability in its total dependence on imported feedstocks, the industry was seeking to establish overseas production facilities to meet its domestic problems of land constraints and high pollution levels. Subsequent to the 1973 crisis, the Japanese industry has found its competitiveness to be severely eroded.

In October 1979, the Japanese Association of Petrochemical Industries formed the Study Committee on Raw Materials to assess the impact on its industry of structural problems attributable to raw materials. In January 1981, the report concluded that the Japanese industry must make further efforts to diversify the types and sources of its raw materials, must reduce the costs, including the import costs of intermediates, and must attempt to move away from commodity chemicals by developing new products of higher added-value. The current consensus in Japan is that the domestic industry will decline as a major exporter of petrochemical products over the long term. At the same time, as it seeks to restructure itself through major scrap and build programs, and to move away from total dependence on naphtha through the use of propane and butane, the industry also plans to support research into chemical synthesis as a way of producing specialty and high-performance chemicals. In light of its industry-restructuring program, the Japanese are expected to look to Canada for imports of (primary) petrochemicals and intermediates to help reduce average material costs by partially replacing high-priced naphtha imports.

The Canadian Industry

By 1984-1985, when major new and planned production facilities for ethylene in western Canada come on stream, Canada will have approximately 5 per cent of the world's ethylene capacity and will be well placed to produce a significant volume of the ethylene derivatives at internationally competitive prices.

Although the Canadian petrochemical sector produces a broad range of products, those which appear to hold the greatest potential for trade with Japan are: ethylene dichloride, ethylene glycol, vinylacetate monomer, styrene, methanol, polyethylene, polyvinyl chloride, polystyrene, polypropylene. Future Canadian output of these products will be significantly greater than domestic requirements and should be competitive internationally. Typically there are two or three producers of each product.

Existing capacity is found in Montreal, Sarnia and locations in Alberta but most of the new capacity that will come on stream in the medium term will be in Alberta and to a lesser extent British Columbia. Petrochemical exports will be made from these sites primarily to the U.S. and the Pacific Rim.

Many Canadian petrochemical producers are subsidiaries of foreign companies. As a result, export sales are usually conducted by the parent companies' international sales offices, which source the output from the production unit that yields the best return to the corporation. In future years however, Canadian-owned companies such as Polysar, Alberta Gas Chemicals, NOVA, and Ocelot Industries, either on their own or in joint ventures, will play an increasingly important role in the industry, and will be in a better position to participate in export activities.

Canadian Marketing Activity and Success Stories

Table 6:

Canadian Petrochemical Exports to Japan, 1980-1981

	1981		1980	
	Tonnes	$('000)	Tonnes	$('000)
Ethylene dichloride	84,000	21,100	109,300	40,300
Ethylene glycol	59,000	41,200	2,300	1,600
Methanol	160,000	46,700	111,300	34,000
Totals*	303,000	109,000	223,000	76,000

Notes: * 1981 figures are rounded to nearest 1000 tonnes or $100,000; 1980 totals only are rounded to the nearest 1000 tonnes and $100,000.
Source: Japanese Import Statistics.

Canada's opportunity for increased petrochemical exports to Japan was given a major impetus in 1979 with the second oil crisis. Prior to that time, the Japanese undertook the

majority of their own further processing from raw material sources. With their vulnerability to oil supply disruptions revealed in 1979, the Japanese industry began to see in Canada a secure and stable source of supply for its required petrochemicals. That pattern of trade (shown in Table 6 above) was repeated in 1980 and 1981, and can be expected to increase and diversify in future years as more new plant capacity in western Canada comes on stream. Japanese equity investment has been encouraged, and the following two projects had been announced as of the time of this writing:

i) a 270-kilotonne ethylene dichloride project in Alberta, which will come into production in 1983;

ii) a petrochemical complex to produce ethylene, ethylene dichloride, vinyl chloride monomer, and polyethylene in British Columbia.

Judging by the vigorous negotiations currently underway between several Canadian and Japanese firms, more announcements can be expected over the next few years. It is likely that a significant portion of the output of the Alberta petrochemical facilities and the proposed British Columbia petrochemical projects will find a market in Japan, or, through Japanese trading companies, in southeast Asia.

Market Considerations

A strong government-industry relationship exists in Japan which recognizes the need to import primary petrochemicals. There has been a recent favourable shift in Canadian-Japanese trade relations as Japan has come to regard Canada as a stable, competitive source of natural resources. Much of Canada's current and planned capacity is based in western Canada, and therefore in proximity to Japan and the Pacific Rim.

The structure of the Japanese industry, however, represents a major impediment to exporters. It is rare to export direct to the consuming firm. Exporters must deal with the Japanese industry infrastructure which is made up of a network of trading companies and producer associations. These associations, and related business practices, make the petrochemical industry stronger than the sum of its individual participants, and can be expected to moderate the rate of any major penetration of the Japanese market.

Competition and Competitor Activity

Current Japanese projects in the Middle East, Singapore and Korea, plus probable future Japanese investments in Alaska and Australia, are all potential competitors for Canada.

Mexico is another potential future competitor. The U.S. Gulf Coast is the prime competitor for Canada at present, but its relative importance may decrease after the decontrol of U.S. natural gas prices in 1985.

The Action Plan[1] **(For contacts see Appendix II)**

As noted in this section, there is a significant expansion of Canadian capacity underway. There is scope for Federal and provincial government initiatives to support the private sector market developments which are proceeding. Apart from monitoring progress and undertaking overall petrochemical sector policy development, the following Federal Government initiatives are planned over the next two years:

i) As a result of a high level industry/association mission to Japan in early 1982, led by the Canadian Chemical Producers' Association, there will be subsequent follow-up in 1982 and 1983 by numerous individual company missions. **(Post/CHE)**

ii) At the 1981 Canada/Japan Business Co-operation Committee, the importance of Canadian petrochemicals was noted. The 1982 meeting in Sapporo, Japan included a specific discussion of petrochemicals on the agenda. Subsequent follow-up on this topic will take place at the 1983 meeting in Montreal. **(Post/DOJ)**

iii) The Federal Government and the provincial governments will continue to evaluate and encourage the formation of Japanese/Canadian ventures in the petrochemical sector. **(Post/CHE)**

iv) Future contributions by the Federal Government will be required in support of studies of market demand, changing Japanese capabilities and the emergence of new competitors. The importance of the Japanese market for petrochemicals will necessitate a disciplined approach to market intelligence gathering by other Posts, on behalf of the Canadian Embassy in Japan and the Chemicals Branch. Such monitoring will include the activities of Canada's competitors in Japan as well as in other markets. **(Post/CHE)**

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1 Unless otherwise indicated the activity/level is considered to be ongoing.

v) The Working Group on Resource Processing, established by the Canada-Japan Joint Economic Committee, having nearly concluded its horizontal policy study activities, will continue to focus on sector specific issues. Petrochemicals have emerged as high-priority items. **(Post/DOJ/CHE)**

vi) With the tabling of the Japan Industrial Structure Council (JISC) report on the petrochemical industry in June 1982, there will be a need to carefully evaluate and assess its implications for the Canadian petrochemical industry. **(Post/CHE)**

For further information on petrochemicals contact the Chemicals Branch, DRIE (see page 234).

3. NUCLEAR REACTORS AND URANIUM

The responsibility for reactor export marketing rests with Atomic Energy of Canada Ltd (AECL). In 1981 the Department of Industry, Trade and Commerce established a CANDU Marketing Secretariat to assist Canadian export marketing efforts. The following section on CANDU marketing outlines the Japanese market environment and current Canadian marketing activities. The subsequent section outlines Japan's demand for uranium for its nuclear reactors and Canada's supply capabilities.

3a. CANDU Marketing

Nuclear Energy Program in Japan

Japan launched its nuclear program in 1956 with the enactment of the Atomic Energy Basic Law which limited nuclear energy development to peaceful use. In 1957, Japan Atomic Power Company was formed by Japan's nine privately owned electric power companies, the government-owned Electric Power Development Corporation, and others to introduce Japan's first commercial reactor, a 166-MW British-made natural uranium gas-cooled reactor (GCR), which came into operation in 1966. With the development of the light water reactor (LWR) in the U.S., Japan's major electric utility companies embarked on their nuclear programs by importing boiling water reactors (BWR) and pressurized water reactors (PWR).

Japan now has 22 units (1 GCR, 11 BWRs and 10 PWRs) in operation with a total capacity of 15,511 MW (second to the U.S.), providing about 12 per cent of Japan's total electric power supply. An additional 11 units (6 BWRs and 5 PWRs) totalling 10,110 MW in capacity are under construction. These are scheduled to come on stream between 1982 and 1986. In addition, five units (1 PWR and 4 BWRs) with a total capacity of 5,280 MW have been approved by the Electric Power Resources Development Co-ordination Council, with in-service dates planned between 1986 and 1989.

The Alternative Energy Plan, approved by the Japanese Cabinet in November 1980, stressed the importance of developing nuclear power, coal and LNG as alternative energy sources to petroleum. A 1990 target of installed capacity of nuclear power was established at 51,000 to 53,000 MW (or about 22 to 23 per cent of Japan's total electric power supply). To meet this goal, 20 units totalling 20,020 MW in addition to those listed would have to be installed by 1990. General indications are that it will be extremely difficult, if not totally impossible, to achieve the 1990 target.

As the lead time needed to complete a nuclear power plant has tended to be long (about 15 years from start to finish) the Japanese Government is reviewing the possibility of simplifying procedures for the regulatory process. In addition, incentives such as government subsidies to regional development programs and discounted local utility rates are now being provided to facilitate siting acceptance.

Japan's basic nuclear reactor development policy is to proceed from the LWR to the fast breeder reactor (FBR). As a national project, the Power Reactor and Nuclear Fuel Development Corporation (PNC) is also engaged in the development of the Advanced Thermal Reactor (ATR), a heavy-water-moderated boiling-light-water-cooled reactor, which has been foreseen as fill-in until the FBR is commercialized.

Japanese policy specifies the estabishment of Japan's own nuclear fuel cycle. At present, Japan is totally dependent on foreign supplies of enriched uranium for power generation.

The Canadian Industry

There are currently about 60 major Canadian suppliers of equipment to the CANDU system including one or two manufacturers of each of the major components of the system. The companies range in size from 15 to 3,000 employees; approximately two-thirds of the firms are located in Ontario and most of the remainder are in Quebec. Many are foreign-owned, but all are free to export CANDU equipment, subject only to government export licenses. With very few exceptions, none of the companies rely exclusively on nuclear business as they are also manufacturers and suppliers to a range of machinery user industries. The industry estimates that it is capable of producing the equivalent of five to six reactors per year.

Canadian Marketing Efforts to Date

Nuclear co-operation between Canada and Japan is carried out under the umbrella of the Agreement for Co-operation in the Peaceful Uses of Atomic Energy of July 5, 1959 that was amended by a protocol which came into force on September 2, 1980. This agreement and amending protocol fully satisfy Canada's non-proliferation requirements concerning the transfer of nuclear items.

The first efforts to introduce CANDU into Japan were made in the mid-1960s by Canadian General Electric. The company was unsuccessful, losing out to the light water reactors (LWR) offered by U.S. companies (Westinghouse and General

Electric). Although contact with the Japanese was maintained by AECL, little effort was directed towards a sale until 1974. By that time, the Pickering CANDU reactors had accumulated an excellent operating record which was attracting world attention. Although Japanese nuclear development policy was at that time intended to be based on LWR's, and eventually utilized the fast breeder reactors (FBR), the attitude towards CANDU was nonetheless more receptive than it had been earlier. Canada undertook a campaign to acquaint Japanese Government, business and industry leaders with the merits of the CANDU system. An important element in this was the meeting between Prime Ministers Trudeau and Tanaka in 1974, when it was broadly agreed that potential existed for nuclear co-operation between Canada and Japan. In 1976, Prime Ministers Trudeau and Miki signed the Framework for Economic Co-operation Agreement, and again flagged CANDU as a prospective area for co-operation.

In 1976, the Japanese Electric Power Development Company (EPDC), with MITI support and research funds, began to introduce CANDU through news releases and personal contacts. Funds were provided for some basic seismic research to demonstrate the resistance of the CANDU design to earthquakes. AECL and EPDC undertook a joint evaluation of the CANDU reactor system from October 1976 to March 1977 to determine what modifications would be required to make the CANDU design conform to Japanese nuclear standards. It was concluded that the necessary modifications could be incorporated without a major re-design. A MITI Energy Advisory Committee also commissioned EPDC to begin a four-year program to establish the necessary technical criteria for heavy water reactors in Japan, and in May 1978, EPDC signed a $1.7 million contract with AECL for a more detailed study of CANDU which was subsequently completed in December 1978.

In the spring of 1978, EPDC was approached by authorities in northern Japan requesting a study siting for a nuclear power plant there. In April 1978, the Japanese Atomic Energy Commission (JAEC) established an Advisory Committee on the Development of Advanced Type Power Reactors to examine the Japanese Advanced Thermal Reactor (ATR) and CANDU with respect to technical and economic aspects, and to clarify what their roles might be in the Japanese nuclear power program. The committee reported in March 1979 that there was not sufficient data available to reach a firm conclusion "whether any reactors to supplement the basic line (LWRs) should be incorporated in quantities in the Japanese power generation system". It, therefore, recommended that with respect to CANDU "the primary effort should be directed to in-depth technical and economic evaluations with a view to

its construction in Japan". Subsequently in August 1979, the JAEC effectively concluded that "at the present stage, it is difficult to find positive reasons for introducing the CANDU reactor". The JAEC added, however, that "should the situation change, calling for a review of Japan's nuclear reactor development line, we would at that point reconsider the situation including the CANDU reactor." The legislation establishing the JAEC stipulates that the Prime Minister must fully respect the decisions of the JAEC. To date, however, the Prime Minister has not acted on the recommendations concerning the CANDU. It is hoped that eventually changes in the situation will take place which warrant reconsideration of the CANDU matter.

In the meantime, MITI has continued to support the continuation of studies of CANDU by EPDC by providing government funds. EPDC began comprehensive technical studies of CANDU in early 1982. The value of these comprehensive studies, which are expected to last about two years, will be about $10 million. It is hoped that these studies will lead to the establishment of the information base required as one of several factors that will go into a final and positive CANDU decision in the reasonably near future.

The Prime Minister, Ministers and officials of the Canadian Government have taken every opportunity to emphasize to the Japanese the importance Canada attaches to the introduction of CANDU into Japan, including the occasions of Prime Minister Ohira's visit to Canada in May 1980, and of Prime Minister Suzuki's visit in 1981.

Further Considerations

By early 1983, the AECL/EPDC co-operative program of comprehensive technical studies will be approaching completion. It is difficult at this point to make any firm prediction as to whether the Japanese authorities would be in a position to take a positive decision on the introduction of CANDU into Japan. There is as yet no consensus within Japan, and the JAEC recommendation of August 1979 against the introduction of the CANDU remains the major impediment to a positive decision. Since that recommendation allowed for the possibility of future reconsideration, it is hoped that the JAEC will re-study the CANDU when a consensus has been reached.

In terms of an export marketing plan, success or failure of the Canadian effort in Japan will depend on many variables, including national-policy considerations, trade relations, industrial-structure considerations, and commercial and technical considerations.

From a national policy and trade relations point of view, it will be necessary to continue to remind Japanese authorities of the great importance Canada attaches to the introduction of the CANDU into Japan in the context of our overall bilateral relations. This is particularly important within the scope of energy relations between Canada and Japan, and in the light of Canada's desire to sell more high technology manufactured products to Japan to achieve a more balanced make-up in exports.

At the technical level, it is becoming generally recognized in Japan that the CANDU is a proven reactor - safe, reliable and economical - with a record of high capacity performance. The essential question remains whether there is a place for CANDU within Japan's overall nuclear development program and the nuclear fuel cycle strategy, apart from the fact that CANDU in Japan would contribute positively to electric power generation. Still to be resolved in Japan is whether CANDU and the ATR are complementary and would contribute positively to Japan's nuclear power development strategy. Canadians and many Japanese believe so, but full consensus within Japan has not been attained. The assurance that an export licence from Japan is available for 30 years' supply of uranium for the CANDU is a positive factor.

At the commercial level, Canada's interests in the CANDU are well-known by the state-owned utility EPDC. There are however, other utilities, government ministries and agencies, and public/private and private sector energy committees who should be reminded periodically of the advantages that CANDU offers, and their support and encouragement sought. AECL participation at technical forums, e.g. JAIF annual meetings, is to be encouraged. The possibility exists for co-operation between Canadian and Japanese companies in the construction of CANDU in Japan (and in third countries), including the transfer of technology under licencing arrangements. Since it is unlikely that large numbers of CANDUs will be built in Japan, the Japanese will probably want to have a clear idea of how third country markets can be cultivated, before making a commitment to develop an indigenous CANDU manufacturing capability. The questions of reprocessing wastes and long-term waste disposal will also have to be considered.

In summary, there appears to be good reason to be positive about CANDU prospects in Japan. The prospects depend on careful and sensitive management and co-ordination of Canadian efforts.

For further information on nuclear reactors contact the CANDU Marketing Secretariat, DEA (see page 234).

3b. Uranium

Japan's Demand for Uranium

After the 1973 oil crisis, Japan embarked on an energy diversification program which substituted, whenever feasible, electricity for oil in industrial use, with such electricity to be produced largely by nuclear generation. Beginning in 1974, Japan also entered into several major, long-term uranium supply contracts with Canadian producers, and enrichment contracts with the Department of Energy in United States, and Eurodif. Japan is thus assured of an enriched uranium supply until 1993-1994.

Partly as a result of Japan's earlier stockpiling program, but primarily because of lower-than-forecast growth in electricity demand, current Japanese demand for uranium has tapered off. The market is relatively thin, with purchases confined primarily to the spot market for make-up quantities. Japan has a very active nuclear program, and can be expected to remain a significant customer for uranium well into the future.

Canadian Supply Situation

The current global economic situation has caused reduced world demand for uranium, and prices have fallen significantly in the last several years. The current world price (approximately U.S.$25 per pound) is near the break-even point for high-cost producers. In addition, current Canadian pricing policy which does not allow low-cost mines (i.e. Saskatchewan) to effectively utilize their competitive advantage, is a disincentive to their establishment.

Since Canada and Australia represent the major incremental supply of low-cost uranium in the world, Canadian and Australian producers are the primary suppliers to the Japanese utilities. Nonetheless, South Africa and Niger together account for over 30 per cent of Japan's supply. In June 1981 the Nuclear Energy Committee of the Energy Advisory Council to the Ministry of International Trade and Industry recommended, inter alia, the establishment of a uranium stockpile, commercialization of enrichment in Japan, and diversification of uranium supply sources and procurement methods. It is essential for the Canadian uranium industry that Japan continue to view Canada as a reliable supplier. It is also important to draw the distinction between Japan as purchaser of uranium, and Japan as a potential CANDU customer. While the potential exists for the sale of a CANDU unit, Japan will nevertheless remain a significant market for Canadian uranium.

The Japanese have periodically expressed interest in joint ventures in uranium resource development, with guarantees of access to the output of the resultant mines. This position has been strengthened by the Nuclear Energy Committee's recommendation to increase procurement from development-import projects (i.e., those with Japanese equity participation). Although Canadian policy does not restrict ownership in uranium exploration companies, however, depending on the extent of foreign ownership, there may be restrictions (via FIRA) on any resulting producing mines. Current Canadian policy restricts uranium exports to quantities in excess of forecast Canadian needs. The Japanese normally seek minority equity in overseas projects, and Canadian uranium ownership policies are supportive of that type of foreign investment.

For further information on uranium supply contact the Energy Group, DRIE (see page 234).

4. ELECTRONICS

The Opportunity

During the Tokyo Round of multilateral tariff negotiations (MTN), considerable attention was devoted to the establishment of a Government Procurement Code which would provide foreign makers with greater access to the Japanese market for telecommunications equipment. No substantial gains were made during the MTN, but subsequently the United States negotiated bilaterally with Japan to include Nippon Telegraph and Telephone Public Corporation's (NTT's) yearly procurement of approximately $3.3 billion under the Code. In December 1980, the U.S. and Japanese governments exchanged letters indicating that Japan's NTT telecommunication monopoly would provide non-discriminatory competitive opportunities to both domestic and foreign manufacturers. Japanese Government officials have guaranteed that NTT will not discriminate against European and other foreign suppliers (namely Canadian) in the course of implementing its new procurement arrangements with the U.S.

The NTT corporate family consists of four large telecommunication manufacturers (NEC, OKI, Fujitsu and Hitachi), plus the firm, Toshiba, which itself would like to achieve a stronger position within NTT. Every firm in the Japanese telecommunications industry has close ties with one of these five companies, creating a true NTT family network. To date essentially all of NTT's requirements have been supplied by this network.

The 1980 agreement with the U.S. segmented NTT's procurement into three 'tracks'. Track I consists of NTT procurement of auxiliary and off-network equipment worth $1.5 billion a year, and will be open to competitive bidding under the Procurement Code. Equipment in this category includes:

i) general materials such as poles, hardware, clothing, paper fuel, furniture and stationary;

ii) non-telephone type terminals and equipment, such as computer (off-line or stand alone) peripherals for off-line computer systems, memory materials for computer systems, measuring instruments, power supplies, conduits, vehicles, data terminal equipment, keyboard displays, marksheet readers, magnetic card readers, keyboard printers, magnetic character readers, PBX and private line switching equipment, MODEM and network control units and facsimiles;

iii) planned new services such as video information retrieval terminals and telemetering service terminals.

Tracks II and III will be used to purchase public telecommunications equipment. Specifically, Track II will apply for the purchase of public telecommunications equipment off the shelf or which requires modification to meet NTT's specifications, including uniformity and quality control. Track III will be used to purchase custom equipment that must be developed especially for, or with, NTT. It is expected that most of NTT's procurement of main-line equipment will fall under Track III.

When NTT determines that there is a need to purchase or to develop a new product, NTT will issue an invitation for participation in the form of a Request for Proposal (RFP) or an announcement to interested and/or capable firms, while simultaneously publishing the invitation in Japan's Kampo or Official Gazette. Firms responding to the published announcement are to be treated in a manner no less favourable than those responding to NTT issued RFP's/invitations.

For a Canadian firm to penetrate successfully this open, but difficult, market will require continued effort and, most importantly, the establishment of a presence in Japan, either through a very active agent or by the opening of an office in Japan. The latter would be essential for Track III procurement.

The interconnect market has undergone a radical change during the past few years. In fact, three years ago, NTT supplied approximately 70 per cent of the total equipment in the interconnect market on a rental basis and the remaining 30 per cent was sold to users by manufacturers. Recently, these ratios have reversed, with 30 per cent supplied by NTT and 70 per cent by manufacturers.

In Japan numerous types of interconnect equipment can be owned by subscribers and connected to the NTT telephone network, provided appropriate approvals are obtained. A few examples of interconnect equipment used in Japan are key telephones, PABX, telephone answering machines, voice/data systems, computers, peripheral equipment, facsimile, teletype equipment, telephone wire, TV receivers, recording scrambler systems, and remote control alarms. It should be noted that many of these items are also included under Track I or Government Code procurement. Foreign suppliers may sell interconnect equipment in Japan provided the equipment obtains NTT type and/or installation approval.

The Canadian Industry

Telecommunications Equipment

Responding to the needs of an affluent society and a vast and territorially rugged country, Canadian companies have made Canada virtually self-sufficient in telecommunications. In the process, Canada has achieved a worldwide reputation in advanced telecommunications and is now recognized as a leader in communications technology. Canadian technology is particularly well suited to Japan's need for sophisticated and dependable systems in the following areas.

In 1978, Canada's Department of Communications (DOC) announced the development of an advanced videotex terminal called Telidon, capable of producing images with a much higher resolution than currently available equipment. Telidon consists of a slightly modified television set or display monitor, an interface decoder device, a telecommunications system and a central computer. Since Telidon has a microcomputer in all its terminals, it can fully exploit recent advances in computer graphics and telecom data technologies to convert the television set into an information tool.

Fibre-optics technology has been utilized in communications systems in Canada since 1976. Industry capacity is currently being augmented by a manufacturing facility for fibre-optic cable and terminal equipment. Fibre-optic field trials and experiments are under way in Canada involving industry, governments and numerous carriers. Bell Canada, Alberta Government Telephone, B.C. Telephone and Manitoba Telephone provide consulting services.

Canada is also self-sufficient in terrestrial microwave telecommunications. Currently, three major microwave networks use various interconnecting spur microwave links across Canada, and the total system also includes more than 100 satellite earth stations that play a crucial role in joining many communities throughout the country.

With the launching of the ANIK A series of satellites in 1972, Canada established the world's first geostationary domestic satellite communications system. Since 1972, a second, third and fourth generation of Canadian satellites have either been built or are under development. Most of the world's commercial communication satellites carry some form of Canadian mechanical and electronic subsystems. In co-operation with NASA, Canada has developed the Remote Manipulation System for the space shuttle program. Spar Aerospace Ltd. is the prime Canadian contractor for satellite and other space systems.

Canada acquired its own national digital data networks in 1973, when DATROUTE was introduced into the Trans-Canada Telephone System (TCTS). Introduction of the Infoswitch and Datapac packet followed in 1977. They in turn linked into U.S. systems and should, in time, form part of an integrated network for voice, data and visual transmission services across Canada and into the United States. Today, Canadian manufacturers and systems companies are designing and developing exceptionally sophisticated information processing services. Northern Telecom and AEL Microtel offer a wide range of products for such applications. Earth station suppliers also include Spar Aerospace, SED Systems, and Raytheon Canada.

Many high frequency (HF, VHF and UHF) mobile radio systems are manufactured in Canada and provide an ever-increasing number of commercial and public services. The systems involve mobile stations, base stations and portables. Demand is growing for mobile radio telephone systems that interface into telephone networks providing access from coast-to-coast. In the Prairies, Alberta Government Telephone operates the world's largest integrated mobile radio telephone service, consisting of 24,000 mobile units hooked up to about 400 base stations. In addition, the private sector in Alberta has more than 30,000 mobile units in service. Canadian suppliers of those systems include Motorola Canada, WR Communications, Spilsbury & Tyndall, and Mobile Data Incorporated.

Premier telecommunications manufacturers, such as Northern Telecom and Mitel, are now looking more closely at the Pacific Rim as a potential market for advanced digital switching products. Both firms manufacture state-of-the-art PABX products that are receiving wide acceptance on export markets. For Northern Telecom, the SL-1 digital switching system can be installed to serve up to 32 different subscribers. Another Northern Telecom product, the SL-10 packet switching system, connects a distributed set of data terminals to a single computer or helps create a single common network for a multitude of computers and terminals as part of the Datapac packet network of TCTS. Northern Telecom recently introduced the DMS (digital multiplex switch) family which includes line concentrators (DMS-1), local office switching up to 6,000 lines (DMS-10), central offices with potential of up to 100,000 lines (DMS-100), toll switching up to 60,000 trunks (DMS-200), and a toll machine specifically designed for international gateway applications (DMS-300).

While Mitel has not yet diversified into CO switches, its line of PABX products, SX/10/20/100/200, has fuelled rapid export market expansion. The company manufactures a wide

range of telecom products designed to improve the technical and operating efficiency of existing telephone exchanges.

Computer Peripheral Equipment

In 1980, Canadian computer industry revenue exceeded $3 billion and increased by 20 per cent from the previous year. Two main sub-sectors accounted for this growth: equipment sales and rentals representing two-thirds of the total, and services the remaining one-third.

The service sub-sector consists of about 700 companies, mostly Canadian-owned, who employ more than 20,000 people. The industry provides a range of systems design services, data processing by service bureaux, consulting and custom software. An average annual growth rate of more than 15 per cent has been realized in recent years and shows no signs of abatement.

Although the Canadian market for computing equipment (hardware) is largely supplied by imports from multinationals, by and large, exports of computer equipment have soared as a result of the high degree of rationalization taking place in the production of hardware (i.e. world product mandates) by foreign-owned subsidiaries located in Canada. Canadian-owned firms have generally chosen not to compete with multinationals in the production of general purpose computers, but have instead concentrated on the design of innovative products which are not produced elsewhere. Such Canadian products cover a wide range of applications, both domestically and abroad, and most incorporate the latest advances in microprocessing. They include the following:

- Canadian-designed word processing systems

- intelligent terminals particularly suited to graphics, computer-aided learning and industrial data collection. A special high resolution terminal has been developed for Telidon applications

- data communications products to link computers to data networks, including packet switching

- custom-designed on-line computer systems for banks, hospitals, stockbrokers, map-making and retailing applications

- proprietary software packages in data base management, file retrieval, and "user friendly" software productivity tools

- desk-top microprocessors for financial management applications in small businesses.

Recent Canadian Marketing Activity

As Table 7 indicates, Canadian success in the telecommunications sub-sector in Japan has been very small in relation to the size of the Japanese market. Sales in the area of computer peripherals have, however, been more substantial in recent years ($19.3 million in 1980), but still represent a relatively small share of the total Japanese market for computer equipment and parts.

Table 7:

Japanese Imports of Canadian Telecommunications and Computer Peripheral Equipment, 1981

	Units	$ Cdn. ('000)	Canadian share of total market** (%)
Telecommunications equipment			
Apparatus for carrier-current line systems	465	247	1.5
Electronic telephone apparatus	223	18	0.8
Telegraph apparatus	8	23	0.9
Parts for telecommunications equipment	284	23	*
Sub-total	980	311	0.5
Computer peripheral equipment			
Storage units	386	5,405	17.0
Readers, memory units, controllers for computer	3	11	*
Automatic data processing machines imported with CPU	1,308	3,379	4.3
Processors	2	29	1.2
Main storage units	-	-	-
Other storage units	1	1	*
Constituent units of data processing machines	2,753	7,233	3.2
Tape converters, printers and auxiliary digital machines	-	-	-
Automatic data processing units	11	11	0.2
Readers for transcribing data onto data, n.e.s.	50	230	1.5
Sub-total	4,514	16,299	3.7%

Source: Japanese Import Statistics

Legend: * Market share less than 0.05%.

** The Canadian share of the total market includes tariff commodity items for which there were no Canadian imports.

In June 1981, Minister Lumley led a trade mission to Japan consisting of senior officials from six of Canada's most competitive telecommunications manufacturers. The mission met with senior officials of the NTT to receive briefings on the procedure which would apply in bidding on NTT procurement requirements.

With the exception of a few firms, Canadian companies made their first concerted marketing efforts in Japan during 1981. As a follow-up to the June 1981 mission, a Telecommunications Show was held at the Canada Trade Centre in October 1981. Five of the original six companies (Northern Telecom Ltd., Mitel Corporation, Exide Power Supplies, Canadian Marconi Company and Gandalf Data Communications Ltd.) were joined by ITT Canada, International Mobile Data Inc. and AES Data. Three of the companies exhibited PABX type subscriber switching products namely those within Track I of the NTT procurement system. Such products also figure prominently in the expanding interconnect market for customer-owned network addressing equipment to be hooked on to the NTT network. The October 1981 CTC show was attended by about 500 people including NTT officials, distributors, agents and competitors. Seven of the eight Canadian companies had already been represented in Japan and their agents were actively engaged in meeting potential customers. The remaining Canadian company is expected to sign an agency agreement for Japan with one or two Japanese distributors. As a direct result of the CTC show, two Canadian firms have begun to explore possible co-operative projects in Japan.

The digital PABX standard of NTT was published in late 1981, thereby alleviating an obstacle for equipment and approvals. Interested Canadian firms have been encouraged to apply for product approvals.

Company approaches to the PABX market vary. Industry capability appears most competitive in the interconnect market, typically PABX, of Track I procurement. Firms with the capability are Northern Telecom, Mitel, ITT Canada, and Gandalf (for modems and PABX products). Other firms, with more specialized capability, which might be eligible for NTT Track II procurement, but for which the market prospects are not yet well-defined, are Canadian Marconi (telex switching systems) and Exide (battery emergency power systems). Other smaller telecom firms such as International Mobile Data Inc. (for mobile data terminals) may be able to penetrate specialized segments of the Japanese market because of its innovative designs and quality products.

With respect to the computer peripherals sub-sector, the strategy to date has been to provide small Canadian firms with an opportunity to demonstrate their products at Canada Trade Centre (CTC) shows in Japan of approximately 18-month intervals. Canadian companies were represented at the CTC Computer and Communication Show in December 1979 and at the International Microcomputer, Microprocessor Data Communications Exposition at Harumi in January 1980.

Canadian Success Stories

As Table 7 indicated, Canadian firms were unable to penetrate the Japanese telecommunications market to any great extent prior to 1981, largely because the market was essentially "closed". However, one Canadian firm, Gandalf, in 1979 hired an aggressive Japanese agent and followed this up by attending the CTC show in 1979 and the subsequent exhibition at Harumi in 1980. By September 1980, Gandalf received approval from NTT for the sale of one unit of its LDM-404 MODEM. As Gandalf's reputation spreads, it will be easier for it and other Canadian firms to obtain approvals for their related equipment.

In the computer software area, such typical Canadian products as specialized computer peripherals or software packages have been sold through Japanese distributors. The following companies and products and services have been most successful to date.

Company	Products/Services
Matrox	Data entry and graphic terminals, special interface boards
AES Data	Word processors
Volker-Craig	Video display terminals
University of Toronto	Software for library automation
Comptec	Key tops for computer terminals
International Mobile Data Inc.	Mobile terminals
Integrated Telecomputer	APL software for microcomputers

Market Considerations

Canadian manufacturers will be able to sell telecommunications equipment for NTT Track I procurement and to the interconnect market through specialized telecommunications agents/distributors. Companies should be able to obtain NTT approval more easily if the agent's name appears on NTT's qualified suppliers' list. To be successful, the agent should have the necessary contacts to approach the interconnect market.

Sales of main-line equipment to NTT, i.e. Track II or Track III equipment, will most likely be obtained by foreign firms which open an office, with appropriate technical representatives, in Japan. Frequent, and in many cases daily, liaison visits will be required with NTT's R&D staff to ensure that the firm is given an opportunity to participate in main-line equipment purchases. This will facilitate the conduct of joint research if the supply of Track III equipment is of interest to the Canadian firm.

Members of Japan's Telephone Equipment Installation Association are used by domestic telecommunications suppliers to install interconnect equipment to NTT's network. With the opening up of NTT procurement, and the easing of approval procedures for the interconnect market, some of the larger firms in the association are considering the possibility of representing foreign telecommunications firms.

Numerous obstacles face the foreign supplier of both main-line and interconnect equipment. The procurement agreement opens up NTT's procurement market, not only to foreign firms but also to several large Japanese electronic manufacturers, which in the past were not part of NTT's "family". Canadian firms, therefore, will have to compete not only with existing NTT suppliers but also with both foreign and new domestic suppliers.

Tariffs could pose another barrier. The recent GATT negotiations reduced the duty on some telecommunication equipment from 15 per cent to 5.7 per cent and others from 7.5 per cent to 4.2 per cent.

Since bidding documentation must be submitted in Japanese, the use of a local agent/interpreting service,or the establishment of an appropriately staffed office, will be necessary in order to comply with this requirement. Tremendous effort must be made by foreign suppliers to understand and comply with NTT installation inspection standards. It should be noted, however, that NTT in the spirit of

co-operation has assisted foreign firms by recently publishing certain of its specifications in English. Standards, reliability and continuity will continue to pose obstacles to foreign suppliers. NTT approvals (Type or Individual) must be obtained for equipment that will be connected to the NTT network. Generally, a document inspection is conducted in response to an application by the user. These applications, written in Japanese, are usually submitted by suppliers, not users, as part of "customer service". Individual document inspection and an application must be submitted for each specific individual installation of equipment.

To simplify the inspection process, the system of Type Approvals was instituted. Type Approval inspection, which, in theory, implies blanket approval for approved equipment, is conducted in response to an application made by the manufacturer or seller of the equipment. While NTT indicates Type Approval will normally be granted within two months of submission of test data, it may be quicker to obtain Individual Approval for a specific piece of equipment. Thus, the volume of potential sales becomes an important factor in determining which approval method the manufacturer should pursue. Once equipment has been installed, an Installation Inspection is required to check if the installed equipment meets technical requirements. This inspection will normally be conducted within 2 weeks of the date the inspection is requested. It may take a company 2-3 years to obtain Type Approval for digital PABX equipment, once an application is submitted to NTT.

Severe competition will be encountered in the interconnect market where most domestic manufactured telecommunications equipment may already have obtained NTT Type Approval. Foreign suppliers will be faced with the necessity of repeatedly applying for Individual Approvals or initiating action to obtain Type Approval.

Installation and maintenance of customer-provided equipment connected to the NTT network must be carried out by Japanese engineers or technicians, who have been approved by NTT by passing a 'recognized engineers' examination. Most Japanese manufacturers and dealers have a number of recognized engineers on their staff. The appointment of the right agent and distributor in Japan could alleviate this difficulty for Canadian firms interested in this market.

The Action Plan **(For contacts see Appendix II)**

The Canadian Government played a major role during the MTN, and in the subsequent bilateral agreement between Japan and the U.S., in ensuring that Canadian firms would be treated

equally. However, now that the market is open, Canadian firms must be prepared to invest considerable time and effort in: selecting the right agent, establishing a local office to facilitate procurement under Track II and Track III, visiting the market frequently to develop contacts and studying how the complex telecommunications market operates in Japan.

The next two to three years will be crucial for the successful penetration of Japan's telecommunications market. The following market development activities are planned[1] by the Federal Government in support of industry initiatives:

i) Canada Trade Centre shows to facilitate the introduction of a variety of Canadian electronics firms to the market. **(DOJ/ELE)**

ii) Participation by Canadian firms in Japanese telecommunication or electronics trade shows such as the Japan Electronics Show (fall 1983). **(DOJ/ELE)**

iii) Encouragement of NTT missions to Canada to familiarize NTT technical and purchasing personnel with Canadian capabilities. **(Post/ELE)**

iv) Encourage participation by Japanese companies in industrial co-operation missions to Canada as a follow-up to the 1982 mission by Canadian Telidon companies to Japan to explore areas for technology exchange/transfer. **(Post/STM)**

v) Utilization of PEMD for selected companies with the long-term potential and resources to adequately pursue the market. **(DOJ/CROs)**

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[1] Unless otherwise indicated, the activity event is considered to be ongoing.

For further information on the electronics sector contact the Electrical and Electronics Branch, DRIE, or the Telidon Marketing Secretariat, DEA (see p. 234).

5. AGRICULTURE AND FOOD PRODUCTS

5a. Overview:

This chapter of the plan considers together food products which range from basic commodities (e.g. wheat, barley, canola) to highly processed foods and food combinations (e.g. frozen meals). It also includes feeds, non-food industrial starches, and a number of other products derived from agriculture or fisheries.

Japan produces 73 per cent of the country's total food requirements, including 72 per cent of its agricultural products and about 93 per cent of the domestic demand for fish products. As a consequence of the country's limited natural resources, and the need to encourage and maintain domestic production, the government isolates the sector from the full impact of foreign competition through a number of protectionist policies. These include import quotas, minimum import price controls, government purchases on a monopoly basis, and customs duties. Regulations restricting the use of certain food ingredients and additives commonly used in processed foods by other countries also have a negative effect on imports. Despite some modest moves to relax restrictions in recent GATT multilateral trade negotiations and elsewhere, plus constant pressure from Japan's trading partners, the basic protectionist structure remains intact and is unlikely to be altered substantially in the foreseeable future.

The Japanese government is committed to maintaining the highest possible level of self-sufficiency. In 1981 the government released a report which set the 1978 self-sufficiency levels as goals for the 1980 decade. The targets have been regarded by many as being overly optimistic, and doubts have been expressed about Japan's ability to meet them.

The long-term trend in self-sufficiency has been declining (in 1960, it was 90 per cent for agricultural products and in 1972, it was 101 per cent for fish products). Earlier efforts to maintain or increase self- sufficiency levels have fallen short of target. Even if the targets were attained, a substantial increase in imports is still inevitable. Food imports, valued at U.S. $18,000 million in 1979, should rise by a minimum of $2,700 million (at current price levels) between 1979 and 1990, solely in response to population increases. As a result of anticipated changes in consumption, the government forecasts an increase in food imports of 41 per cent in this same time period, based on 1978 prices. In terms of volume, Table 8 indicates a

Table 8:

Long Term Prospects for Demand and Production of Agricultural Products: Supply Projections to 1990

(000 metric tonnes)

Commodity	1978			1990			
	Demand	Production	Imports	Demand	Production	Projected imports	% Self-sufficiency
Rice	11,360	12,590	-	9,700-10,200	9,700-10,200	-	100
Wheat	5,860	370	5,564	6,410	1,220	5,190	19
Barley/rye	2,380	330	1,489	3,490	580	2,900	17
Potatoes	4,930	4,690	240	5,190	4,790	300	93
Soybeans	4,800	380	4,680	5,990	840	5,150	14
Peanuts/legumes	450	217	233	500	299	201	60
Vegetables	16,860	16,410	450	18,260	17,999	261	99
Fruit	7,900	6,160	1,740	9,350	7,680	1,676	82
Eggs	2,040	1,980	60	2,250	2,220	30	99
Sugar	2,920	670	2,278	3,210	1,020	2,190	32
Tea	110	-	-	120	-	-	-
Beef	560	410	150	885	630	255	71
Pork	1,470	1,320	103	2,030	1,940	90	96
Poultry	1,090	1,020	70	1,510	1,460	50	97
Other	36	33	3	45	42	3	93
Oils and fats	1,910	610	1,300	2,590	730	1,860	28
Roughage	5,180	-	-	9,410	-	-	-
Forage crops	(3,800)			(7,510)			
Condensed feed	18,930	4,890	14,040	23,350	5,970	17,350	26
Feed	24,110	-	-	32,730	-	-	-
Fish products	11,900	10,340	1,560	13,960	11,100	2,860	80
Import Totals			33,490			40,095	66

Source: Ministry of Agriculture, Fisheries & Forests, Japan's Agriculture Review, December 1980.

projected increase in imports of 6.6 million tonnes or approximately 20 per cent by 1990. The products included in the projections cover only those basic items which are capable of being produced by Japanese agriculture and fish industries. Such products as rapeseed, coffee, grapefruit and processed foods are omitted and consequently total imports are, and will be, substantially greater than the table indicates.

A second factor favourable to imports is the increasing acceptance of western-style foods. In recent years, there has been a displacement of protein from vegetables by protein from meat; this trend may not continue at the same rate in the future. As more women enter the work force an increased use of convenience foods can be anticipated, with the result that many other western foods will be accepted. Not all of these products will be imported. The Japanese food processing industry is large, including more than 80,000 plants with annual shipments in excess of 20,000,000 million yen (approximately $110,000 million) and over one million employees. Leading companies are conscious of the diet changes which are occurring and are diversifying to meet the new demands. Nevertheless, attractive export opportunities exist for Canada in many product areas.

Canada's Role as a Food Supplier to Japan

Japan has traditionally been Canada's largest single market for agricultural products and the second largest market (after the U.S.) for fish products. The value of Canadian exports to Japan rose from $767 million in 1975 to $1,371 million in 1979 then dipped to $1,168 in 1980. The decline in Canadian exports in 1980 was closely tied to the collapse of the herring roe market, where sales dropped by $130 million from the record 1979 price levels. Canadian food exports to Japan recovered dramatically in 1981, with sales of $1,600 million. Although this was an increase in absolute terms of approximately 37 per cent relative to 1980, Canada's share of the Japanese market for agricultural products has been declining.

There is no doubt that Japan will remain a large and increasingly important market, and that Japan will continue to regard Canada as a stable long-term supplier of agriculture, fish and food products.

Current Market Development Activity

For the past several years, market development activity in Japan for basic commodities has been concentrated on provision of technical data, product development (particularly in

rapeseed), plus missions and other efforts designed to raise the level of knowledge about Canadian products and supply capabilities. In the processed foods area, the emphasis has been directed to introducing Canadian companies to the Japanese market, assisting them to secure agents and make initial sales, and promoting sales through activities designed to encourage consumers to purchase Canadian products. These activities have taken a variety of forms, including:

- market identification trips by Canadian firms;
- missions - ministerial, technical, selling and buying;
- store promotions - Canada Food Fairs;
- seminars - technical, market;
- solo shows - trade show featuring single group of products (e.g. fish).

In addition to these direct promotional activities, Canadian firms are provided with market intelligence and an advisory service regarding access to the Japanese market. Japanese protectionist policies combined with a relatively complicated distribution system, have tended to discourage companies intent on selling to Japan. The Canadian Embassy in Tokyo is active in informing firms about regulations and in assisting them in their marketing efforts to achieve their sales objectives. The Federal Government continues to try to minimize the negative impact of Japanese regulations by seeking their reduction or elimination through regular informal consultations on specific problems.

Canada's objectives for this sector are to meet the competition of other supplying countries, to regain and maintain its market share in various commodities, and to ensure full participation in the large and growing Japanese market. The plans for the 1980s include the continuation of existing activities at their current levels, additional participation in national fairs and agent shows, and the establishment of representational offices in Japan for Canadian firms and associations. In particular, Canada's participation in the Foodex '82 show in Tokyo was part of an effort to promote Canada's image as an overall food supplier and not simply as the source for only a certain number of agricultural commodities.

The following sub-divisions of the Agriculture and Food Products sector are relevant to the Japanese market and will be dealt with in the remainder of this chapter:

- cereal, grains and products,
- oilseeds and oilseed products,
- fish products,

- livestock, meat, cheese and processed food and beverage products,
- agricultural products (forage seeds, dehy alfalfa, peat moss).

5b. Cereal, Grains and Products

The Opportunity

Wheat production in Japan in 1980 was approximately 600,000 tonnes and imports of wheat were 5.6 million tonnes. The Japanese government is encouraging the diversion of acreage from rice to wheat production, potentially doubling domestic production to 1.2 million tonnes. With Japan's stable per capita consumption of wheat (due to the quota system), and Japan's forecast population growth of 1 per cent per year, total wheat import requirements may be expected to remain stable in the near future and possibly decline slightly in later years.

The Canadian market share of current annual wheat imports is approximately 1.3 million tonnes, all destined for food use. Canadian wheat is recognized as being of consistently high quality, and should continue to be favoured for food use in the Japanese market. Wheat presents a continuing opportunity for Canadian exports.

Japanese domestic production of barley is approximately 0.3 million tonnes, and may increase as a result of government encouragement to reduce rice acreage. Barley imports total 1.5 million tonnes of which Canada supplies about 0.9 million tonnes.

Feed barley is used primarily as a conditioned single ingredient feed and very little imported barley is used in compound feeds. Although this is a limiting factor in the expansion of barley exports to Japan in the long term, it may work to Canada's advantage during the current years of rice surplus in Japan. Plans to divert domestic food rice into compound feed production up to the end of 1984 in Japan will displace imports of corn and sorghum, mainly from the U.S., on a one-for-one basis. In the longer term, promotion of barley as a compound feed ingredient in Japan might enhance Canada's barley export potential to this market, provided the Canadian product remains competitive.

Although the trend towards westernization of Japanese dietary habits has increased per capita meat consumption dramatically, further increases are expected to be moderate. Thus increases in coarse grain import requirements in

the long term will be largely dependent upon population growth and possible changes in livestock nutrition and feeding habits.

Japan's beer consumption, already the highest in Asia, is expected to increase at an annual rate of 2.5 to 3 per cent. Correspondingly, Japan's malt imports are expected to increase by 33 per cent to 0.6 million tonnes in the period 1978 to 1985. It is expected that Canada's share will be approximately 22 per cent of Japan's malt imports by 1985, provided that Canadian transportation and production costs remain competitive, and that Japanese brewing companies continue to import malt.

Japan is expected to continue as Canada's largest export market for buckwheat, with imports of approximately 34,000 tonnes of Canada's total average buckwheat exports of 41,000 tonnes. Canada has developed a particular buckwheat variety - MANCAN - for the Japanese market.

The Canadian Industry

The major Canadian cereal grains in order of commercial importance are wheat, barley and corn. In terms of volume, wheat dominates Canada's grain export trade, with exports over the past 10 years of approximately 15 million tonnes annually; wheat flour exports on the other hand have averaged 0.7 million tonnes. Barley exports have averaged 3.8 million tonnes per year, and exports of malting barley accounted for approximately 0.4 million tonnes of the annual total. Corn exports are growing and were in excess of one million tonnes in 1980/1981; production is mainly in Ontario, but expanding rapidly in Alberta and Manitoba.

The Canadian Grain Commission (CGC) is responsible for grading and quality control of grain and for the supervision of its handling. The Canadian Wheat Board (CWB) is the sole export marketing agency for Prairie wheat, oats and barley. Other western grains such as rye and buckwheat, and eastern grains, including corn and Ontario wheat are marketed by the private grain trade. The Canadian International Grains Institute (CIGI), 60 per cent funded by the (former) Department of Industry, Trade and Commerce and 40 per cent funded by the CWB, is a promotional agency with the purpose to help maintain and enlarge domestic and export markets for Canadian grains, oilseeds and their products. CIGI offers instructional programs to foreign participants selected from countries purchasing these commodities and to Canadians associated with the grain industry.

The capacity of the Canadian grain handling and transportation system has been substantially improved in recent years

by such government-funded measures as the purchase of 14,000 rail hopper cars and an ongoing rail branch line improvement program. Private sector-funded expansion (such as the Pioneer Grain Company terminal in Vancouver) and construction of high-throughput country elevators have also contributed greatly to the capacity and efficiency of the system.

Recent Canadian Marketing Activity

The importation of food grains and barley for feed is conducted by the Japan Food Agency (JFA), which calls for tender submissions, generally on a weekly basis, to ensure an orderly flow of grains. The Canadian Wheat Board and the Japan Food Agency have negotiated annual wheat and barley agreements in recent years. (The agreement for 1982 specifies that Canada supply 1.3 million tonnes of wheat and 900,000 tonnes of barley.) The JFA provides the CWB Tokyo office with a monthly estimate of requirements, and on that basis, the Canadian Wheat Board notifies its accredited western export agents of stocks available for export to Japan. The actual transactions occur between the Canadian Wheat Board agents and private trade importers in Japan, who in turn sell the imported wheat and barley to the Japan Food Agency for domestic resale.

In September 1981, both the Grain Marketing Office and several provincial governments received delegations from the JFA, from the Japanese Grain Importers Association, and co-ordinated the visits of the annual Japan Feed Council Mission to Canada.

Canadian Success Stories

Japan has been purchasing Canadian grain since 1949 and has become one of the most important regular markets for grains: normally Canada's third largest wheat buyer, and the leading barley, rye and malt purchaser. Significant effort has been made to ensure timely delivery and to deal quickly and efficiently with any quality or quality control problems which may occasionally arise. Canadian companies have succeeded in retaining Canada's share of Japan's malt import purchases in recent years.

Market Considerations

Because JFA sees the need to diversify its supply sources, it has limited Canadian wheat imports to high quality wheats. Canada has therefore not shared in the large market for lower quality wheat.

There are no tariffs for Canadian wheat and barley. Tariffs for oats are free up to a quota limit, and 10 per cent above

the quota. Tariffs are 5 per cent for rye. In the case of malt, the tariff is 5 per cent up to a certain quantity point and then 30 yen/kg. above the annual quota level. There are tariffs for wheat flour for processing (12.5 per cent), wheat flour for direct consumption (24 per cent), and buckwheat (15 per cent).

Japan's domestic production of wheat and barley will continue to be subsidized at levels well above world prices, strongly encouraging production increases. Given Japan's modest rate of population growth, stable per capita consumption of wheat, and stabilizing consumption of meats, the rate of growth of cereal grain imports may be slower than in recent years.

Canada's reputation for high quality grains and products continues to be a major advantage in marketing efforts by the Canadian Wheat Board, private grain traders and malt producers. Canada's lengthy trading history with Japan, combined with promotional efforts, has contributed to the development of considerable goodwill among the agencies and trading companies involved in grain trade.

The Competition and Competition Activity

The U.S. is Japan's main wheat supplier (57 per cent of the market), followed by Canada and Australia (20-25 per cent each). The coarse grain market is dominated by U.S. corn, although there are also imports of barley from Canada and Australia, and sorghum from Argentina. Canada's major competitors are all well represented in Japan through private grain trading companies and organizations such as the Australian Wheat Board and U.S. Wheat Associates (a U.S. Department of Agriculture co-operator working to promote exports of U.S. wheat).

The U.S. promotional efforts have paralleled those of Canada in such areas as the hosting of incoming Japanese missions; e.g. the annual Japan Feed Council Mission to both the U.S. and Canada. The promotional efforts of the U.S. Wheat Associates have included the establishment in Japan of baking industry schools, and the encouragement of consumption of wheat products in school meal programs.

The Action Plan[1] **(For contacts see Appendix II)**

Japan is an important established market for Canadian cereal grains and products, and maintenance and expansion of Canada's presence in the Japanese market will involve the following activities:

[1]Unless otherwise indicated the activity/event is considered to be ongoing.

i) Maintenance of the existing good supplier/purchaser relationship between Canada and Japan (the Canadian Wheat Board and the Japanese Food Agency), through the continuation of ministerial visits and general consultations, meetings and exchange of information at the government level. **(Post/GMO)**

ii) Continuation of promotional activities in the form of federally sponsored outgoing missions, and the participation of Japanese industry representatives on CIGI courses and technical seminars. **(Post/GMO)**

iii) More emphasis by the Federal Government and the industry on the promotion of increased exports of processed cereal grain products such as malt, provided that capacity is available. **(Post/GMO)**

For further information on cereal, grains and products contact the Grain Marketing Office, DRIE or the Department of Agriculture (see p. 235)

5c. Oilseeds and Oilseed Products

The Opportunity

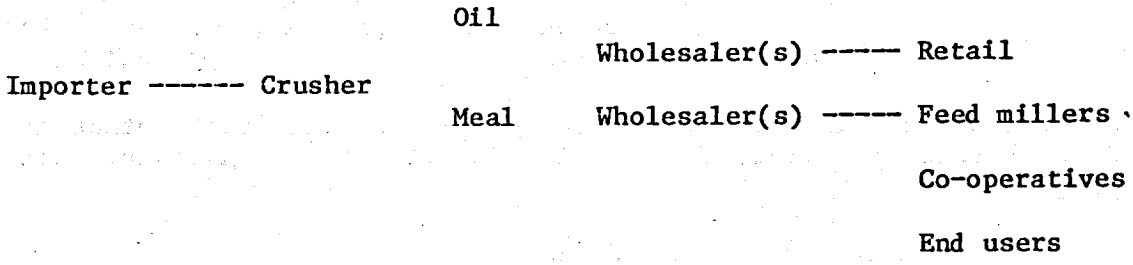
The total Japanese market for oilseeds (roughly $2.5 billion or 6 million tonnes in 1980) increased by 4.7 per cent or 269,000 tonnes between 1979 and 1980. Soybean imports in 1980 accounted for over 73 per cent of the market: rapeseed imports decreased slightly from 1979 but still accounted for approximately 18 per cent of the market. Rapeseed represented $364 million of the total value of all oilseed imports. Canadian rapeseed, in turn, represented 99 per cent of the total rapeseed imported by Japan. Canada remains Japan's primary source of flaxseed, importing 119,000 tonnes in 1980 with an approximate value of $40 million.

Canola oil and soybean oil are for the most part interchangeable, but there is an increasing consumer preference for canola oil in traditional uses such as in salad oil and tempura cooking. Increased use of processed canola (i.e. margarine, mayonnaise) would provide a larger market for Canadian canola producers. The Japanese will use canola meal in their feed rations if it is competitively priced at 65 per cent the price (or below) of soybean meal, due mainly to differences in protein content and energy values. Japan is expected to gradually increase imports of canola oil and meal over the next decade.

The edible oil market in Japan is sensitive to general economic conditions in the country. Economic forecasters are predicting a continued, albeit moderate, strengthening

of the Japanese economy on the basis of which market opportunities are likely to materialize. The Japanese crushing industry is known to be operating close to capacity. There are no plans for additional plants at present, although some expansion and upgrading of existing facilities may take place. Without significantly increased crushing capacity, Japan will likely place more emphasis on the importation of crude oil and meal in the next decade.

The distribution channel for rapeseed is quite structured, but nevertheless sophisticated, due to the interdependence of the various components of this industry.



Although pricing and the price relationship between rapeseed and soybeans will continue to be key factors affecting sales of rapeseed, Japan has recently been prepared to pay premiums of $40-$50 per tonne for Canadian canola. This premium reflects the higher content (40 per cent) of oil in canola relative to soybeans (18 per cent). The increased Japanese interest in the oil content of imported oilseeds arises from an oversupply of high protein oilseed meals due to a slackening animal feed demand, combined with a shortage of vegetable oil.

The use of canola meal as a feed ingredient is increasing. This is due in large measure to research in animal nutrition performed in Canada, the results of which are applicable to the Japanese feed industry. There has also been a co-operative program between Canada and Japan on the determination of metabolizable energy values. Results are not yet conclusive, but if Canadian results are proven acceptable, there should be a further increase in canola meal utilization in Japanese animal and poultry feeds.

The Canadian Industry

Canada produces four edible oilseeds - canola/rapeseed, soybeans, sunflowerseed and mustardseed, and an industrial oilseed - flaxseed. Oilseed export activity is conducted by about 12 grain trading firms, both Canadian and multinational, based in Winnipeg and Vancouver. Approximately 10

firms are involved in exporting oil and meal. The Japanese market for oil and meal has been difficult to penetrate because Japan has excess crushing capacity. The Japanese tariff structure and Canada's Crow's Nest Pass rates also make it more advantageous for Japan to import the raw seed. However, some Canadian rapeseed processors have Japanese equity investment which could encourage increased Japanese imports of canola oil and meal.

Oilseed products, i.e. oils and protein meals, are produced by ten Canadian companies operating 12 processing plants. Approximately two-thirds of the production is consumed in Canada, and one-third is exported. Canola/rapeseed oil and meal are the principal export commodities. Forty per cent of soybeans crushed in Canada and substantial volumes of soybean meal are imported from the U.S. to meet Canadian market requirements. Direct employment in the processing industry is approximately 1,200. Capital investment is approximately $350 million (not including edible oil refineries or feed processing plants).

Table 9:

Canadian Oilseed Exports to Japan 1979-1981

	1979		1980		1981
Oilseed product	Vol.*	$ mil.	Vol.*	$ mil.	Vol.*
Canola/rapeseed	1,158	368	995	309	801
Canola oil	9	6	10	7	13
Canola oilcake and meal	-	-	1	-	12
Total canola	1,167	374	1,006	316	826
Soybeans	6	2	21	8	35
Flaxseed	99	31	108	37	101
Mustardseed	5	2	7	3	7
Total oilseeds	1,277	409	1,142	364	969

Legend: * volume expressed in 000s metric tonnes
- volume less than 1000 tonnes or value less than $1 million

Totals may not add due to rounding.

Source: Statistics Canada

The canola/rapeseed processing industry has expanded greatly over the past five years. A new plant was recently completed at Windsor, Ontario to primarily process soybeans but also rapeseed, flaxseed and sunflowerseed in replacement of an older facility in Toronto. A new plant with a daily capacity of 600 tonnes is due to come on stream in October 1982; another plant of equivalent capacity is planned for 1983. Established plants are continually being upgraded to improve their capacity.

The canola/rapeseed processors are largely export-oriented, while processors of other oilseeds tend to be oriented to the domestic oil and meal market. Canola oil is exported through Vancouver, Quebec City and Halifax; canola meal moves through Vancouver and Thunder Bay. With the recent expansion in the canola-processing industry, even more of the production is intended for the export market. Principal oil markets are currently India, Algeria, Hong Kong and Japan; canola meal is exported mainly to western Europe and the United States.

Canadian Marketing Activity/Success Stories

As indicated in Table 9, oilseed trade with Japan has increased over the years, with the most dramatic growth occurring in sales of rapeseed. Most of the increase in rapeseed exports is the result of the extensive research which has been conducted in Canada to develop new low erucic acid - low glucosinolate rapeseed varieties. These new varieties, called canola, have been extremely well received in Japan. Although the volume of Japanese rapeseed imports declined in 1980 from their record level in 1979, the Japanese crushing industry continues to be greatly interested in this product. The 1980 decrease in rapeseed exports resulted from a drop in vegetable oil consumption in Japan, due in part to the fact that the price of rapeseed exceeded that of soybeans for a period of three months. However, 1981 exports indicated an upward trend to 1.2 million tonnes. Rapeseed is currently selling at a premium of $41 to $45 per tonne in Japan due to the reduced requirement for meal and increasing oil utilization. Rapeseed thus offers an advantageous oil to meal ratio.

There is Japanese equity interest in two major Canadian rapeseed crushing companies. In addition to giving Japanese industry a window in Canada, and keeping them in touch with Canadian current technology it should also be of some benefit in obtaining export orders in Japan. Most Canadian companies have marketing agency agreements with Japanese companies.

The major share of rapeseed exports to Japan have been handled by XCAN Grain Limited, which is a Canadian grain exporting firm representing the Alberta, Saskatchewan and Manitoba Wheat Pools.

XCAN through its Tokyo office has been successful in its ability to source supplies, and arrange transportation and delivery of a high quality product to the Japanese crushing industry. XCAN is well-known for its knowledge of the world oilseeds markets and has been successful in establishing an efficient market information network.

The Federal Government in co-operation with provincial governments and industry, has for many years promoted the export to Japan of oilseed, oils and meals through trade missions, technical seminars and the exchange and provision of technical information and promotional literature. In 1980, three trade missions visited Canada, the Japanese Oils and Fats Wholesalers Association, the Japanese Margarine Association and the Japanese Feed Council.

In 1981/1982 meetings were held with an incoming Japanese mission from the Oilseed Processors Association. The 1981 Canada-Japan Canola Consultations took place in Saskatoon in July 1981, previously they have been held in Tokyo. A series of canola meal seminars has also taken place in Tokyo and Osaka. Research and industrial development activities have been supported and aimed at product and process improvement, market expansion, and import substitution to the general benefit of the Canadian economy.

The Canola Council of Canada and the Japan Oilseed Processors Association (JOPA) recently held a competition in Japan for the best recipes using canola oil. The two winners visited Canada in the summer of 1982.

Market Considerations

The rate of duty on rapeseed oil is 17 yen/kg, whereas rapeseed meal and rapeseed enter Japan free of duty. The tariff on rapeseed oil is the same as for other edible oils and is therefore not a factor in discouraging Japanese imports of rapeseed oil.

Competition and Competitor Activity

The U.S. is, and will continue to be, Canada's major oilseed competitor in Japan. The U.S. market share is over 70 per cent, and Japan's traditional use of soybeans for feed and food will likely maintain that predominance. U.S. and Canadian exports make up over 90 per cent of Japan's oilseed

requirements, and the remaining 12 to 14 other oilseeds are specialty products which offer no major competition to either of the two major products.

Soybean domination of this market is due in part to the promotional activities of the American Soybean Association (ASA). The ASA maintains a Tokyo office with a staff of six and substantial financial resources, which is involved in the usual promotional activities associated with operations of this type. The ASA has funded a number of programs aimed at Japanese consumers to promote and increase soy oil use. Information exchanges, visits and consultations between the U.S. and Japanese governments and their respective industries are also encouraged. The recent Japanese interest in highly polyunsaturated vegetable oil, such as sunflower oil, could pose a threat to the consumption of less unsaturated oils such as soy and rapeseed.

Japan has recently begun importing increasing quantities of palm oil for specific uses, primarily because of lower prices. Although Japanese investment in palm oil plantations in Malaysia and Indonesia is also an important contributing factor.

The Action Plan **(For contacts see Appendix II)**

The size of the Japanese market, major competition from soybeans, and the potential competition from European rapeseed exporters, demand that a high priority be given to the Japanese market. Elements of a successful marketing effort[1] directed at maintaining and expanding Canada's presence in the Japanese market for oilseeds and oilseed products will include the following initiatives and considerations:

i) With Japan representing a substantial portion of Canada's export market for rapeseed there is industry interest in increasing our representation in Japan. The Canola Council of Canada has under consideration the establishment of a permanent office in Tokyo. An active and serious assessment by the Council of the costs and advantages of establishing such an office is in progress. Japanese interests are also working with the Canola Council in joint promotional programs for canola oil in Japan, with some funding from the Council and the Prairie Provinces. **(Post/GMO)**

ii) Although informed members of the Japanese trade are generally familiar with the name canola, there are

[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

many who do not know what it refers to. It is necessary that Canada's promotional efforts in Japan stress the canola designation. **(Post/GMO)**

iii) Continuation and expansion of technical seminar activity in Japan, institutional type visits and exchanges, and the annual Canada/Japan canola consultations. **(Post/GMO)**

iv) Sponsorship of visits to Canada by Japanese industry representatives should be encouraged. **(Post/GMO)**

v) Ministerial contact should continue to reassure Japanese interests of the importance Canada places on the Japanese market for Canadian oilseeds and products. **(Post/GMO)**

vi) The expansion of production of oilseeds in Canada, together with the upgrading and expansion of our oilseeds processing capability should continue to keep up with market growth. **(GMO)**

For further information on seeds and oilseed products contact the Grain Marketing Office, DRIE or the Department of Agriculture (see p. 235)

5d. Fish Products

The Opportunity

Japan is the world's largest consumer of fish products (67 kg per capita). In recent years, the annual catch by Japanese vessels has exceeded 10 million tonnes, which is equivalent to approximately one-seventh of the total world catch. This supply is augmented by average annual imports in excess of one million tonnes. In 1980, for example, these imports totalled 1.04 million tonnes.

Japanese Government projections show demand increasing from 12 million tonnes in 1978 to 14 million tonnes by 1990. Imports are expected to meet approximately half of that increase, and consequently will rise from 1.6 to 2.9 million tonnes.

Japan is Canada's second largest export market for fish (approximately $105 million in 1980). Canada is the principal supplier of fish roe ($50 million in 1980) and a significant supplier of squid, salmon, herring, groundfish and shellfish. From 1977 to 1979 the value of exports to Japan was much higher than in 1980 because of a highly speculative herring roe market which collapsed in December 1979. A much more stable market for a variety of Canadian fish products is now developing in Japan.

Japan is essentially a fresh/frozen fish market. Some consumer products such as kamaboko or surimi, the base from which kamaboko products are made, are quite different from anything produced in Canada.

Traditionally, Japanese imports have been controlled by a few large trading companies and co-operatives. Many products are covered by import quotas which are allocated to importers rather than exporting countries. Unless the customer (wholesalers/processors) for one of these products holds a quota he has to buy through an importer who does. Recently, some of the larger institutional and retail merchants have been granted quotas and are making direct purchases of both quota and non-quota fish items.

The Canadian Industry

The Canadian fishery consists of an Atlantic, a Pacific, and inland sectors which are distinct from one another in size and organization as well as in species caught, technology employed, products sold and markets served. Together in 1980 they produced a landed value of over $728 million, and a product value of $1.65 billion. Of this total, 80 per cent, or nearly $1.3 billion was exported. In 1980, Canada was the world's leading exporter of fish products for the third consecutive year, even though we ranked only about fifteenth in terms of catches. Fifty per cent of this export value went to the United States, 25 per cent to the European Economic Community and 8 per cent to Japan.

There is a sizeable Japanese debt capital investment in the Pacific coast fishery, but equity ownership and control remains Canadian on both coasts. The smaller companies generally lack the sophistication in international trading, but this is rapidly changing as they gain more experience.

Cod is the major commodity of the Atlantic fishery, followed by groundfish, herring, scallops and other shellfish.

Canada's Atlantic fleet consists of an offshore fleet that operates year around, and other vessels that are limited to a seasonal inshore or midwater fishery. Twelve of the largest plants generally operate year around, and a number of smaller plants scattered along the coastline, (generally seasonal in operation) process the landings by the inshore fishermen of the immediate area. There are about 20 canneries, 270 freezing plants and an equal number of curing plants. Over 45,000 registered fishermen and 15,000 plant workers (full and part time) are employed by the Atlantic fishery.

Salmon is the mainstay of the Pacific fishery. The fluctuations of a speculative herring roe market in Japan and a fishermen's strike in early 1980 distort the figures. For

that year, based on a three-year average (1978-1980), total landings are about 150,000 tonnes (40 per cent salmon) with a product value in excess of $500 million. Over 40 per cent of the Pacific production is sold domestically. Export markets for salmon are principally the European Economic Community, United States, Japan, Australia and New Zealand while herring roe is sold almost exclusively to Japan. The principal export markets for shellfish (oysters, clams, and crab) are Japan and the United States.

The Pacific processing industry consists of three large companies, two of which are co-operatives and over 100 plants of medium and smaller-sized companies. Canning is much more common as a processing operation than on the east coast, but there are also freezing, smoking and roe extraction operations. In 1979, 11 groundfish plants produced mainly frozen fillets and blocks.

Recent Canadian Marketing Activity

PEMD FOOD Section B (Market Identification Trips) is frequently used by companies who wish to explore and develop Japanese marketing opportunities. The unique characteristics of traditional Japanese eating habits are not simple product differences but have a strong cultural base. For that reason, it is important that Canadian suppliers get to know the Japanese people in order to better understand that market.

In April 1979 a trade mission representing about fifteen Canadian processing companies visited Japanese companies and hosted presentations of Canadian fish products in Fukuoko, Osaka and at the Canada Trade Centre in Tokyo. A year or so later, a group of buyers representing the Japanese supermarkets and industrial catering industries accepted an invitation to a two-week tour of the major Atlantic, Pacific and inland fisheries. This group represented most of the growing western-style grocery and supermarket trade in Japan. Their visit has led to new distribution for Canadian fish products.

A successful in-store promotion of Canadian fish was held in the food department of Seiyu department stores in March 1981. Seiyu executives were sufficiently pleased with the results to request a similar Canadian participation in subsequent years. Fish products constituted 30-35 per cent of total food sales under this promotional program.

Canadian Success Stories

A significant Canadian market share has been secured in only a few products areas - herring roe, salmon and squid - but there have been an increasing number of sales in a wide

variety of other products. More than 100 Canadian companies are already engaged in exporting food items to Japan. All major fishing companies such as Connor Bros., Fishery Products, National Sea Products, H.B. Nickerson and Sons, and United Maritime Fishermen on the Atlantic Coast, and B.C. Packers and the Federation of Fishermen's Co-operatives on the Pacific Coast are involved in exporting. In Ontario, Omstead Fisheries is a major supplier of fresh-water smelt.

Success in the Japanese market for fish products depends, to a large extent, on Canada's ability to adapt to Japanese product requirements and opportunities. For example, a market for Canadian herring roe, built up during the 1970s, received a temporary setback in 1980 when Japanese speculators overstepped the bounds of consumer tolerance. The market is now recovering on a much more stable basis. There are, of course, other factors that can disturb an established market pattern. A good illustration would be the Canadian squid market which developed rapidly during the late 1970s when there were shortfalls in Japanese domestic catches, but diminished drastically when unusually heavy landings by the Japanese domestic fleet in 1980 reduced the demand for imports. This market too is expected to recover. Meanwhile, the Canadian companies involved with the Japanese in the development of the fishing technology for squid are diversifying their marketing efforts to other countries.

Market Considerations

The most serious impediments to penetration of the Japanese market are competition from foreign and Japanese domestic suppliers, transportation logistics, import quotas, and the quality of Canadian products.

Import quotas have been effective in protecting the Japanese fishing industry from foreign competition in certain species. Another facet of the quota system that has affected Canadian processors is the absence, or considerable delay in the announcement of the quotas. This situation has resulted in the inability of Canadian companies to pack to special Japanese specifications. The Japanese import system allocates quotas to specific Japanese importers, thus a potential supplier must identify an importer who has access to a quota before entering into negotiations. Quotas are annual but are announced in two semi-annual increments; normally an unused quota can be carried over to the following year. It is worth noting that squid is the Canadian product most seriously affected by the quota system.

The distance, particularly from Canada's Atlantic coast to Japan, makes shipping costs too high for competitive pricing

of some species. West coast products generally fare better because the higher unit value (for herring roe, salmon roe, and salmon) lowers the relative impact of the shipping costs. Trade opportunities would be further enhanced if more frequent service and lower rates could be negotiated to Japan (and other western Pacific countries) from either Canadian coast. Much of the present difficulty arises from the reluctance of foreign shipping companies to allocate sufficient refrigerated containers to permit the development of new business.

A large part of the Japanese market is committed to fresh fish which Canada cannot supply because of distance, or to special products like kamaboko which uses very inexpensive fish and requires special processing technology. Under the current cost/price structure it is unlikely that Canada will become a significant supplier of kamaboko, but there is potential for high quality frozen fish for use when fresh fish supplies are inadequate or unavailable. The Japanese regard the single-price system employed by Canadian companies inflexible particularly for some of the lower grade products. Another difficulty has been quality. Although the Canadian industry has the capability to supply quality products, there is not always consistency between Canadian suppliers, or between one shipment and the next.

Canada's advantages in the Japanese market for fish products include: plentiful supplies, friendly relations at the political and the commercial level, and a relatively good appreciation by the Canadian fish exporters of the special requirements of the Japanese market.

Competition and Competitor Activity

Since the Japanese fishing fleet provides 90 per cent of the total domestic consumption, and the import quota system favours Japanese landings, a small shift in demand or supply can have a major impact on imports.

Japan, nevertheless, imports fish from more than 55 countries. With the introduction of the 200-mile zone, world trading patterns have undergone a notable shift. On a value basis, the United States has become Japan's leading supplier, followed by South Korea, Taiwan, and Indonesia. Canada ranked either fourth or fifth in the three years ending in 1979. In terms of tonnage, Korea is the largest supplier of tuna, squid, cuttlefish and wakam; the U.S. supplies salmon, crab, herring and salmon roe; Taiwan, eel and tuna; Spain, octopus and squid; the U.S.S.R., capelin, cod, pollock and whale; and Indonesia and India supply shrimp.

The Action Plan[1] **(For contacts see Appendix II)**

The basic objective for Canadian fish marketing efforts in the Japanese market is to continue to support traditional sales, through the export promotion activities of the Canadian industry, with the assistance of the Food Branch and the Canadian Embassy in Japan. Canada should increase the emphasis on sales of processed fish products from the Atlantic coast and encourage joint venture opportunities in processing as means of accelerating product development and market access to Japan. The Department of Fisheries and Oceans will participate in those initiatives, as well as in the co-ordination of more detailed Federal/provincial fisheries marketing plans for Japan. Market development activities planned at three levels - trade, consumer and government - include the following initiatives:

i) The promotion of those products which offer the best potential (including processed seafoods) through increased trade missions, product demonstrations, exhibits, and participation in fairs such as Foodex. **(Post/FPB)**

ii) Consumer-oriented activities will consist principally of retail store and product demonstrations designed to emphasize Canadian products in both traditional and developing food habits. **(Post/FPB)**

iii) Canadian negotiations in both formal and informal discussions will be directed towards the eventual removal of the import quota system on both processed and unprocessed fish products, and not on acquiring a special status within the system. **(Post)**

iv) Joint ventures between Canadian and Japanese companies to undertake processing of the finished products required by the Japanese market will be encouraged and simplified. **(Post/FPB)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on the fish products sector contact the Food Branch, DRIE or the Department of Fisheries and Oceans (see p.235).

5e. Livestock, Meat, Cheese and Processed Food and Beverage Products

Livestock

The Opportunity

Japan has for many years imported top quality dairy and beef cattle to improve its own herds. Dairy imports have been ongoing for over 15 years. During the past five years almost 2,000 purebred dairy cattle worth $15.5 million and 1,600 purebred beef cattle, worth $3.0 million have been imported. The market has now levelled off, and less than 500 head have been imported over the last three years. No change in this pattern is expected as Japan will continue to purchase top quality animal genetic material as the need arises.

Only a small but steady market for breeder swine exists in Japan. A growing interest in Canadian horses has developed as a result of the recognition and acceptance of Canadian horsemeat for use in sashimi.

Artificial insemination and embryo transplants would be of interest to Japanese breeders, but the Japanese Government's prohibition of imports of semen except for experimental purposes will effectively preclude any commercial activity in this area.

All sales are made on a strictly commercial basis, without government financing, almost entirely through Japanese trading corporations.

The Canadian Industry

The Canadian livestock industry is spread across the country; dairy cattle are concentrated in Ontario and Quebec, beef cattle in the three Prairie provinces. Most breeding stock is produced by small, family-owned and operated farms throughout the country. The average dairy cattle herd consists of 35-45 milking cows; the average beef cattle herd 70-100 cows; and the average swine herd 80-100 sows.

Most exports of live animals are handled by approximately 12 private firms. These companies purchase animals from breeders, assemble them, prepare the necessary documentation, and make all the shipping arrangements. There are also a few large-scale breeders and the Alberta-Canada All Breeds Association who export mostly their own animals. The Saskatchewan Agricultural Development Corporation (a provincial crown corporation), and the Manitoba Department of Agriculture are also involved in the export of livestock.

Canadian capability for increasing the supply of breeding animals and other genetic material is well-established.

About 90 per cent of Canada's dairy cattle exports are of the Holstein-Friesian breed. It is estimated that up to 26 per cent of the annual purebred registrations could be exported each year without depleting the genetic base. The generation interval for swine is sufficiently short that the industry could gear up production quickly enough for just about any new export opportunity.

Canadian Marketing Activity

Table 10:

Canadian Livestock Exports to Japan, 1981

	Number	$Value 000*	Per cent change 1981-1980	Per cent of Japanese Market		
				1978	1979	1980
Purebred dairy cattle	307	2,757	-29.7	11.5	13.4	13.8
Purebred beef cattle	389	927	+39.0	4.2	3.6	6.4
Purebred swine	-	-	-	-	-	-
Semen, bovine, NES.	-	-	-	-	-	-
Total *	796	3,684	-19.9	8.2	9.0	9.4

Legend: * totals rounded to nearest $1000 (value)

As indicated in Table 10, Canadian marketing efforts in Japan have not been extensive in recent years, because the Japanese agricultural sector is very familiar with Canadian genetic capabilities. Japanese agriculture importers and breed associations regularly visit Canada and have established contacts. Some of these visits have been assisted by Federal programs. The number of Canadian firms participating is, however, fewer than 10.

No Canadian or Japanese trading houses located in Canada play any part in sales of livestock to Japan.

Canadian Success Stories

In Japan, as in other countries, the Canadian Holstein-Friesian dairy cow has proven to be the star of the show. Only the best quality animals have been exported, and although their number averages only about 460 head per year, their annual dollar value of approximately $5 million has

made Japan a major importer. The quality of the Canadian product has been the key to success, as is the case in most breeding stock sales.

Canadian beef breeding stock has made good progress, rising from practically nil in 1975 to over $900,000 in 1981. Good individual company contacts and the quality of product are the reasons for this export increase.

In 1980, sixty head of Canadian horses were imported by Japanese firms for breeding purposes.

Market Considerations

The usual health requirements for livestock raise some impediments to trade. The Canadian Government has made representations to the Japanese Government to remove the restrictions on artificial insemination imports. The quality of the genetic material available from Canada is, however, well-recognized.

Competition and Competitor Activity

Major cattle competitors are the U.S. and Australia. Swine competitors include the above and Denmark and the Netherlands. Export activities of these countries resemble those of Canada, and consist mostly of exporters visiting Japan and encouraging incoming visits from Japanese buyers.

The Action Plan **(For contacts see Appendix II)**

Continuing to supply adequate information on Canadian livestock genetic capabilities and facilitating visits of Breed Association officials to Canada are essential in maintaining and improving Canada's share of this market. In particular, the following initiatives[1] will be encouraged:

i) A public relations program in Canada offering prizes for champion livestock. **(FPB)**

ii) Support for Japanese incoming missions to Canada and encouragement of buyers' visits to tie in with shows such as Western Agribition held in Regina in November each year. **(POST/DOJ/FPB)**

iii) Provincial government support for such shows as the Calgary Bull Sale in February each year. **(Alberta)**

[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

iv) The development of promotional literature highlighting the quality aspects of Canadian cattle, their adaptability to Japan's climate, and Canada's demonstrated ability to deliver. **(FPB)**

Meat Processing

The Opportunity

In 1981, Japanese imports of meats (beef, pork, poultry, horsemeat and mutton) totalled about 447,000 metric tonnes (M/T), of which Canada's share was 51,337 M/T or 11.5 per cent. The Japanese Ministry of Agriculture, Fisheries and Forestry's (MOAFF) available import projections for beef, pork, poultry and processed meats show an increase from 267,000 M/T in 1978 to 403,000 M/T in 1990. In that forecast only beef is expected to increase in volume while pork and poultry are predicted to decline.

Beef: In 1981, beef production in Japan totalled 470,000 M/T (carcass weight). Imports, which are restricted by quotas controlled by the Livestock Industry Promotion Corporation (LIPCO) equalled 122,400 M/T. Canadian exports represented 4,103 metric tonnes or 3.2 per cent. It is expected that by 1990 imports will reach 255,000 tonnes. The two areas of interest to Canada are the Hotel Quota and the Grain Fed portion of the General Quota which totalled about 3,000 and 17,000 tonnes respectively in 1981.

Pork: Production of pork in Japan in 1981 totalled 1,395,801 tonnes (carcass weight) and imports were equivalent to 182,926 tonnes (carcass weight). Canada is one of the leading suppliers of pork to Japan, shipping 42,590 tonnes in 1981. MOAFF projections forecast a decline in pork imports to 90,000 tonnes in 1990. Traditionally, Japan has imported pork for processing purposes. Recently however, there has been a growing demand for table meat.

Horsemeat: Since domestic production of horsemeat is less than 5,000 tonnes, Japan imported 52,887 tonnes in 1981. Canada supplied 4,635 tonnes or 8.7 per cent. Canadian horsemeat has developed a good reputation as a high quality product for table use and sashimi. If continuity of supply can be assured, prospects for additional sales are good.

Processed Meat: In 1981 the production of processed meat (ham, bacon, sausage) in Japan totalled 411,229 tonnes; imports were approximately 3,000 tonnes or 0.07 per cent.

The Canadian Industry

Meat processing is the largest food processing industry in Canada and accounts for about one quarter of all food and

beverage industry shipments. Over 400 establishments employing about 35,000 people, are registered under the Federal Meat Inspection Act. The industry is distributed nation-wide, with the greatest concentration in Ontario and Quebec. Establishments vary in size from a few to more than 1,000 employees.

The industry participates strongly in export trade. The chief markets for Canadian processed meats are the United States, Japan, the EEC, the Caribbean, and parts of Central and South America. While the volume of exports has grown steadily in recent years, the growth is always dependent on, and sometimes limited by, the domestic supply of livestock.

Technology in the industry is high. Canadian firms have gained international recognition for their introduction of new technology, as well as for the quality of their products. The general thrust of technological development is towards cost reduction, improved and new products, increased automation, and the fullest possible utilization of all animal materials.

Recent Canadian Marketing Activity

Beef: Efforts by Canadian packers working with Federal and provincial marketing support, to secure a portion of the hotel quota are continuing. The high quality beef quota is periodically opened to tender and Canadian exporters have secured a share of this business.

Pork: Canada shipped pork to Japan in 1957, 1958 and 1964. However, it was not until 1968 that exports became continuous. They rapidly developed to attain levels of 25,000 to 35,000 metric tonnes per year for the past seven years.

The Japanese trade has recognized the high quality of Canadian pork, and this has contributed to the success of exports to this market. Canada has consistently ranked in the top three by volume of pork suppliers.

During the 1970s, several long term contracts were developed between hog producer marketing boards, Canadian meat packers, and Japanese meat importers, all of which had expired by March 1980. During the first few months of 1982 several long-term contracts were signed or were in the process of negotiation. While the contracts are of some significance to Canadian export sales development, the bulk of export orders have been generated through spot market sales.

Processed Meats: Some Canadian sales have been made, chiefly to the hotel, restaurant, and institutional trade. Some firms have successfully developed and sold products tailored to Japanese tastes and specifications.

A mission of processed pork manufacturers visited Japan in March 1980 and concluded that market opportunities existed for Canadian sausages. Based on that assessment, a processed meat buyers' mission from Japan visited Canada in October 1980.

Horsemeat: Japan has been a major market for Canadian horsemeat for several years, purchasing 26 per cent of Canada's exports in 1980 and 33 per cent in 1981. The latter represents 9 per cent of Japanese imports. Horsemeat is produced in Canada almost exclusively for export, utilizing all horses available. Increased sales to Japan are more likely to be at the expense of other export markets rather than from increased production since the supply of horsemeat is limited.

Canadian Success Stories

The success of Canadian pork and horsemeat exports to Japan is due to the willingness of the industry to produce the type of product the Japanese require, cut, trimmed, and packed to meet Japanese specifications. Many small, medium and large firms have earned a solid reputation for consistent, quality products. Considerable sales of such cuts as inside/outside skirt have been made mainly because of tariff definition problems and their non-inclusion in the quota system.

Market Considerations

Beef imports are closely controlled by quotas administered by the Livestock Industry Promotion Corporation (LIPCO) and handled through a limited number of importers. For high quality beef, LIPCO has prepared an approved list of firms (including six Canadian companies) whose past performance has been acceptable. New importers do not have ready access to this listing.

The variable duty regulations on pork has been regarded by some as an impediment since it imposes a high level tariff on the product. Others see it as beneficial to Canada since the amount of duty payable can be minimized by maximizing the degree of boning and trimming on the finished product, i.e. increasing the level of added value to the product.

While the duty on processed meats is relatively high, and Japanese ingredient and additive requirements are stringent, these impediments are not insurmountable.

The Competition and Competitor Activity

The U.S. Meat Export Federation has a trade promotion officer in Tokyo who promotes U.S. meats through shows, demonstrations, advertising, etc. The Australian Meat and

Livestock Corporation and the New Zealand Meat Producers Board also have full-time representatives promoting their products in Japan.

Canada's major competitors for pork are Denmark and the U.S.; both are extremely active. Danish exports are assisted by EEC restitution payments and their willingness to take on forward sales at relatively low prices, thereby preventing normal market forces from taking effect. However, since March 1982 Japan has placed a ban on Danish meats for an indefinite period of time because of an outbreak of foot and mouth disease in Denmark. Taiwan and South Korea have both been active in varying degrees in the past few years, but the high cost of feed has tended to reduce their marketing efforts.

The Action Plan[1] **(For contacts see Appendix II)**

Canadian livestock producers have been encouraged to produce sufficient livestock to satisfy both domestic and export market demand. Their success in that endeavour will in turn affect the ability of meat processors to increase sales in Japan. The following promotional activities are planned:

i) In view of the aggressive marketing practices of other country suppliers, Canadian participation in agent shows and fairs (like Foodex) is proposed for all meats. **(Post/FPB)**

ii) To promote pork sales, outgoing and incoming missions are planned to encourage sales of portion control cuts and fancy meats. **(Post/DOJ/FPB)**

iii) In the case of beef, the Canadian industry will be encouraged to find new ways of satisfying Japanese tastes and of meeting Japanese specifications. **(FPB)**

iv) At the present time, work is underway to develop a Canadian standard definition for pale, soft and exuded (P.S.E.) pork. Once the standard is defined and adopted by the industry, the Japanese trade will be notified. This should help to strengthen relationships and eliminate a source of conflict with the Japanese trade since the evaluation of P.S.E. products at present is a judgmental decision between buyer and seller. **(FPB)**

v) Canadian exporters will be encouraged to investigate new methods of selling pork to Japan. There appears to be scope for the development of consumer-sized packs. **(FPB/Post)**

[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

vi) Endeavours will be made to develop standardized packing procedures for all pork products. **(FPB)**

Specialty Cheese

The Opportunity

Although specialty cheese has not traditionally been a part of the Japanese diet, acceptance has been growing rapidly in recent years. In 1980 total imports of natural cheese were 74,487 metric tonnes with about 70 per cent imported from Australia and New Zealand. The increase in cheese consumption (approximately 4 per cent per year) has been partly due to the overall westernization of the Japanese diet, and partly to the prestige associated with (wine and) cheese consumption.

In 1980, Japanese processed cheese production by the four domestic manufacturers totalled 65,928 tonnes, with almost 90 per cent produced from domestic and imported cheese. Each year the Japanese government permits a portion of imported cheese (equal to double the domestic production) to enter duty free. All remaining cheese imports are subject to a 35 per cent tariff.

In 1980, 20,420 tonnes of imported natural cheese were consumed without further processing. Of that amount, approximately one-quarter was retailed to consumers and three-quarters went to institutional users. About 80 per cent was in block or shredded form and the remainder was in cream and powdered forms. This market is less price sensitive than other food markets.

Canada's competition comes from Denmark and the Netherlands where shipping problems are similar. Although some strong cheeses have been successfully marketed, Canada is more likely to benefit by focussing on the milder cheeses such as Gouda, Oka, Brie, Camembert, Edam and Cheddar.

The distribution system for imported cheese is very unstructured, with some importers acting as their own wholesalers, some retailers importing directly and some domestic dairy companies importing and wholesaling independently. All of these alternative routes are available to Canadian firms wishing to export cheese to Japan.

It is estimated that imports of cheese used for further processing will increase at an annual rate of 5 per cent, and that natural cheese for direct consumption will increase at an annual rate of up to 10 per cent.

The Canadian Industry

There are two principal types of dairy plants in Canada, the fluid milk and the industrial milk dairies. The former produce milk for direct consumption by pasteurizing and homogenizing and standardizing the fat content of raw milk. Marketing and pricing are under the jurisdiction of the provinces and are controlled by provincial milk agencies.

Industrial milk plants, on the other hand, manufacture products such as butter, cheese, milk powder and evaporated milk. Prices these plants pay for industrial milk are controlled by the Federal government under the National Dairy Support Program. The Federal government, through the Canadian Dairy Commission (CDC), establishes a target support price for industrial milk and, as well, indirectly controls the price of manufactured dairy products through the offer-to-purchase program for butter and skim milk powder. The support program has been a major stimulus to the rationalization of the industrial milk sector, which in recent years has been able to construct optimum-sized central plants utilizing advanced technology.

Dairy plants of both types are located in every province, with the highest volume of production coming from Quebec and Ontario. Total value of shipments in 1979 was about $4 billion. Small plants employing less than 20 people account for 6 per cent of industry shipments; medium-sized plants employing 20 to 100 people produce 37 per cent; and large multipurpose plants, some with over 1,000 employees, process 57 per cent of industry shipments.

Exports are monitored through the Canadian Dairy Commission. Chief exports are skim milk powder, cheddar cheese and evaporated milk. Total production, and hence, exportable product, is controlled through the quota system established by the National Dairy Support Program.

Canadian Marketing Activity

Although several Canadian manufacturers have exported to Japan, their volume of activity is relatively small. In 1979, for example, exports were less than one tonne and in 1981 no exports occurred. Problems were encountered in the areas of transportation and price competitiveness relative to the EEC cheeses.

Market Considerations

A duty free quota exists for cheese and curd for further processing. The quota fluctuates with the demand by about 20,000 tonnes. The quota is equivalent to twice the domestic production of natural cheese. All other cheese imports enter without quota restrictions but are subject to a 35-per cent tariff.

The need to ship at least container lots, Japanese subsidy payments, and the Japanese distribution system (involving as many as 7 to 10 middlemen), are constraints to Canadian trade. The primary impediment however is the Canadian price which even with the CDC subsidy, is higher than that of major competitors; Japanese importers are therefore resistant to it.

Competition and Competitor Activity

Seventy per cent of the cheese which is imported for processing is supplied by Australia and New Zealand. Their low prices (without subsidization) and proximity to Japan give them a marketing advantage over almost all competitors.

Denmark and the Netherlands are the major competitors in the direct consumption cheese market. Their market share has been won by 20 years of market promotion and subsidy payments on cheese exports. European suppliers have well-established promotion campaigns including point-of-sale displays, trade magazine advertisements, and discounts to assist the importer.

The Action Plan **(For contacts see Appendix II)**

During the past three years the Canadian cheese industry has been approached to participate in missions going to Japan. In each instance there was insufficient support for a separate mission since the uncompetitive pricing of the Canadian product is a major deterrent to market penetration.

At the Hoteres and Foodex Show held in Tokyo in March 1982 the Japanese response to the participation of the National Dairy Council (representing Canadian dairy processors) was extremely favourable and was one of the major highlights of the show. Future participation of dairy processors in Foodex Shows will be encouraged, and it is hoped that Canadian cheese exports will thus be launched. **(Post/FPB)**

Processed Food and Beverage Products

The Opportunity

Japan is one of the world's largest importers of processed and semi-processed grocery products such as: confectionery, biscuits, fruit and vegetable preparations, starches, margarine, alcoholic beverages, wines and other prepared foods. In 1980, total imports of these products were valued at $1.7 billion, of which Canada supplied less than 1 per cent.

Distribution channels are many and varied; they can involve several levels of importers plus primary and secondary wholesalers. There is a growing trend toward direct-import buying by some of the larger retail chains. The distribution channels are dependent on the type of product and on such factors as target markets and potential sales volume.

The market for processed foods and beverages is expanding and opportunities for a diverse range of products exist. It is essential to analyze opportunities on an individual product basis. In fact, consumer acceptance and support of brand names within groups calls for separate strategies for individual brands. The analyses should consider domestic production, current levels of imports, demand trends, competitive cost advantages, ability to supply and commitment to the Japanese market. The commitment involves the willingness to engage in promotional activities and to consider sales in smaller package sizes than typical for the North American market.

The Japanese program for self-sufficiency in agricultural production has not been as effective as planned, and the self-sufficiency ratio continues to decline. The continuing westernization of the Japanese diet creates export opportunities for western foods, and for the semi-processed intermediary products that are ingredients of western style dishes produced in Japan.

The Canadian Industry*

The food and beverage processing industry* is the largest of the manufacturing industries in Canada. In 1976, the industry absorbed 13 per cent (220,193 employees) of total

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* This industry description covers the entire processed food and beverage sectors, including the dairy, fish and meat subsectors previously discussed in this report.

manufacturing employment and produced 18 per cent ($17.3 billion) of total shipments of its own manufacture. It is also one of the most diverse of industries. Within its individual subsectors of more than 5,000 plants, it manufactures a wide range of products which differ in combination of inputs used, the nature and extent of processing, the technology required and the intended market.

The industry represents an essential link in the food chain between producer and consumer. As such, it provides the major market for primary agricultural products. Employment in the industry is relatively evenly distributed across Canada and accounts for a very high proportion of total manufacturing employment in both the Atlantic and Prairie regions. Total industry employment has been generally stable in recent years, although there have been some significant changes within individual subsectors resulting from such factors as consumer demand, trade flows, technical advances and rationalization.

Output of the industry has been expanding steadily, although at a somewhat slower rate than the total manufacturing sector. Growth has been dependent on changes in population increased demand for more highly processed products, and increased consumption or trade in certain items.

About 90 per cent of domestic demand for processed foods and beverages is supplied by the industry. In most instances, imports consist of products not manufactured domestically, including processed tropical and semi-tropical foods and beverages, and items with special brand, quality or geographic identification.

Industry exports generally represent between 9 and 11 per cent of overall output. Exports in 1977 exceeded $2.0 billion providing an important contribution to total exports of the manufacturing sector.

Canadian Marketing Activity/Success Stories

As Table 11 indicates, Canada's activities in certain selected products has averaged less than one-half of 1 per cent. Nevertheless, whatever success has been achieved in the Japanese market has been the result of concerted efforts over several years.

Table 11:

Japanese Imports from Canada of Selected Food and Beverage Products, 1979-80

Commodity	1979 Canadian imports (million yen)	Percentage total commodity imports	1980 Canadian imports (million yen)	Percentage total commodity imports
Honey	75	1.4	46.3	1.0
Frozen vegetables	41	0.2	0.8	-
Sugar confectionery	39	0.7	9.3	0.2
Chocolate confectionery, Cocoa	12	0.1	33.3	0.2
Cake mix, baby foods	227	15.4	95.4	8.5
Macaroni, spaghetti	2	0.1	11.2	0.8
Bread, wafers	-	-	6.2	3.5
Bakery products	16	2.4	19.4	0.3
Prepared vegetables and fruits	85	0.2	71.5	0.1
Misc. food preparations	117	0.2	266.7	0.6
Beverages, spirits	358	0.4	320.6	0.3
TOTAL	967	0.4*	913.3	0.3**

Legend: * equivalent to $5.27 million
** equivalent to $4.98 million

Source: Japanese Import Statistics

An in-store and restaurant promotional program was established several years ago with selected Japanese supermarkets and restaurants whereby Canadian goods are promoted during special Canadian events. This program covers all food sectors. A typical promotion can generate direct sales of $4 million and influence indirect sales of much greater amounts.

PEMD FOOD Section B (Market Identification) has been a useful tool for encouraging Canadian processors to visit Japan. It is interesting to observe that many Canadian companies have chosen to visit this market on a regular basis without the use of government export assistance programs. In turn, Japanese buying missions to Canada come frequently. They are often self-financed, which is indicative of the increasing awareness of Canada as an excellent source of processed and semi-processed food products.

The following products are among those that have achieved modest sales volumes in Japan: Mott's Clamato Juice, Clover Crest Honey, Old Tyme Syrup, Roger's Syrup, Heinz Pickles, Canadian beers and whiskeys, as well as some pasta products (Primo).

Market Considerations

There are several impediments to the penetration of the Japanese market. The domestic food processing industry is a major factor in virtually every product category. Domestic firms have access to local raw materials, or goods imported at relatively low tariffs, and they produce finished products which are generally protected by substantial tariffs. The import quotas for such products as beef, milk, fruit juices, cheese, etc. have been designed to protect the appropriate Japanese agriculture and food processing industries from offshore competition. Similarly, standard import prices for pork, sausage, hams etc. are designed to protect Japanese processors; an artificial price is set for the import product at which point a tariff is levied.

The Japanese Food Sanitation Laws (JFS) are based on the positive list system, i.e. if a food additive is listed it is allowed. The traditional Japanese diet is substantially different from the western diet, and the costs for changing the Canadian production process to meet Japanese requirements (i.e. food regulations and smaller-sized packages) are high.

The Competition and Competitor Activity

Canada's principal competitors in this sector are the United States, New Zealand and Western European countries. Some of these countries such as the U.S. and the EEC have advantages in economies of scale which are not available to Canadian producers, while others, notably Australia and New Zealand, enjoy access to comparatively low-cost raw materials. Ocean freight rates to Japan are lower from the U.S., Australia, and New Zealand than from Canada, so that these are additional costs for Canadian producers to overcome.

European countries actively promote their image as preferred sources of biscuits (Britain and Denmark), confectionery (Britain, Germany and Switzerland), and jams (Britain, France). Similar products from Canada therefore face intense competition from these traditional brand name sources.

The Action Plan **(For contacts see Appendix II)**

As noted, there are opportunities in virtually all product lines for a company or companies to acquire an attractive volume of business, provided that they are willing to make the necessary investment of time and money. The major thrust of promotional sales of processed foods has been the In-store and Restaurant Promotional Program. This, together with PEMD FOOD, is expected to be the cornerstone

of promotional efforts in the future. The extremely favourable response to Canadian participation in the 1982 Foodex Show in Tokyo was encouraging. The following initiatives[1] are planned over the next two years:

i) Identification of opportunities on a product by product basis, and an assessment of its suitability for promotion in the Japanese market. **(FPB/Post)**

ii) Participation in the on-going in-store promotion program in Japan and an increased emphasis in developing a national exhibit for subsequent annual Foodex Shows. **(Post/FPB)**

iii) Individual firms will be encouraged to develop a specific (longer term) market plan for the product(s) so identified, to maximize the marketing efforts of their own initiative and those jointly supported by governments. **(FPB)**

iv) The Federal Government will continue to seek the reduction or elimination of import barriers (tariffs, quotas, food regulations, etc.). **(Post)**

For further information on the livestock, meat, cheese and processed food and beverage sectors contact the Food Branch, DRIE or the Department of Agriculture (see p. 235)

5f. Agricultural Products

Forage Seeds

The Opportunity

Since Japan is geographically small, and many Canadian forage seed varieties are not adaptable to Japanese climatic conditions, the Japanese market for forage seeds is limited. However, there is no import tariff on the seed of most legume and grass crops, and the strict phytosanitary requirements, particularly relating to the presence of ergot, have recently been relaxed, making the market more accessible.

In the past 15 years, Japan has embarked on a program to stabilize dairy production by improving its forage crop culture and by upgrading and increasing its grassland area. During this period, the country more than doubled

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

its forage acreage. Canadian exports of forage seed to Japan increased from 381,000 pounds in 1960 to 1,739,000 pounds in 1980. Japan has provided Canada and other countries with substantial opportunities for the sale of forage seed. Although some annual fluctuations do occur, forage seed imports have continued to grow slowly.

Japan is not able to produce sufficient seed in commercial quantities and an excellent market is available for multiplication of Japanese varieties in Canada. While the U.S. has been the major supplier, the Japanese prefer to diversify their seed sources, and consequently Canada should be able to retain its share of this market. Varieties of timothy, red clover and creeping red fescue are agronomically suitable for the northern island of Hokkaido and higher plateau areas of southern Japan.

The Canadian Industry

Canada has traditionally been one of the world's major producers of forage seed, exporting as much as 70 per cent of its domestic production in some years. Canadian farm cash value is approximately $25 million, involving more than 2,000 herbage seed producers. Another 50 firms participate in grading, packaging and marketing. These companies employ approximately 1,000 people. The overall production of forage legumes and grasses has remained fairly constant in the past 12 years.

Seed is grown in virtually every province of Canada, but production for export is chiefly located in the moister, shorter season areas of western Canada particularly in the Peace River region of Alberta and British Columbia, the northern part of the black soil zone in Alberta, Saskatchewan and Manitoba, and the Interlake area of Manitoba. Alsike Clover, single-cut red clover and creeping red fescue varieties grow well in the northern areas.

Since Canada has six principal climatic zones stretching across a wide geographic area, forage seed varieties can be produced for a wide range of climatic conditions, from temperate to cold short growing seasons. Canadian seed production has always been supported by excellent research programs designed to improve plant breeding, and to produce varieties with winter hardiness, resistance to disease, quality and yield characteristics. In combination with a reliable seed certification system, this plays an important role in building Canada's excellent international reputation in this area.

Production and marketing for export normally takes one of two forms: contract seed multiplication, or forage seed production for export. Since Canada has large areas of

land well-suited climatically and economically to forage seed production, forage seed can be more economically produced in western Canada than in the countries where it will eventually be consumed. This has led to a specialized business in which companies operating out of western Canada sign sales agreements with foreign companies to obtain seed from them, multiply it under contract and ship the progeny back to the country of origin. Seed under contract can be certified for genetic purity either under the Canadian pedigree system or under the Organization of Economic Co-operation and Development (OECD) herbage seed scheme. Canada was one of the first members of the OECD Scheme for Varietal Certification of Herbage Seed Moving in International Trade. Production of seed in Canada under this scheme has been highly successful and has increased rapidly over the past ten years.

Traditionally, forage seed for export was simply grown on speculation by the producers and purchased by seed companies trading in both national and international markets. The bulk of this product is common or commercial seed destined primarily for the United States and other countries which still accept common seed as opposed to pedigreed seed. However, there has been a significant move in Canada towards the production of pedigreed forage seed under contract. The overall production of pedigreed forage crops in 1980, including private and unlicenced varieties amounted to 117,172 acres (47,438 hectares) as compared with 114,659 acres (46,421 hectares) in 1979. With the increase in breeding programs in Europe and Japan, a demand has developed for the production of pedigreed seed of the importing country's varieties, or of varieties shown to be adapted there.

As Table 12 indicates, Japanese imports of Canadian varieties fluctuated between 1975 and 1981 with growth beginning to level off during this period. This fluctuation is reflected in the demand for most Canadian clover varieties. Grass seed varieties such as creeping red fescue and timothy have continued to show growth over that period. Canadian alfalfa exports to Japan increased dramatically in 1981 and will likely continue to grow as Canadian alfalfa production makes a comeback.

The Canadian share of the forage seed market was around 6-10 per cent by volume during the years 1975-1981. Shipments to Japan represent about 5 per cent by value of total Canadian exports of forage seed.

Table 12:

Canadian Forage Seed Exports to Japan, 1975-1981

	1975		1977		1979		1981	
	Vol.*	$000	Vol.	$000	Vol.	$000	Vol.	$000
Alfalfa	-	-	-	-	-	-	66	143
Cloverseed alsike	20	8	33	16	158	51	24	13
Cloverseed, red, single cut	33	12	172	77	146	67	69	30
Cloverseed, red n.e.s.	26	16	1	-	55	43	26	19
Cloverseed, n.e.s.	-	-	5	7	15	6	-	-
Grass seed, creeping red fescue	401	118	690	257	589	364	712	562
Grass seed, meadow fescue	13	4	102	33	134	123	171	125
Grass seed, timothy	257	93	539	707	502	383	517	287
Grass seed, n.e.s.	521	100	1,259	222	54	41	48	20
Totals	1,271	351	2,801	1,319	1,653	1,078	1,448	994

Notes: * Volume in '000s lbs. (imperial)
Source: Statistics Canada

Canadian Marketing Activity

In the 1970s, a series of missions and PEMD-sponsored efforts were undertaken by ITC to promote Canada's ability to supply quality seed, on a continuous basis, at competitive prices, either through contract multiplication or direct seed exports. A Technical Seed Mission to China and Japan in 1978 provided a forum for the exchange of information on Japan's seed industries and research direction to facilitate trade. Subsequently, Japanese seed companies and Ministry of Agriculture officials expressed an interest in importing more forage seed from Canada, in expanding contract multiplication of Japanese varieties in Canada, and in testing early maturing Canadian hybrid corn varieties. In 1979, ITC sponsored an incoming mission to expose the Japanese to seed growing areas and to discuss and promote contract multiplication of Japanese varieties in Canada for re-export. As a result of these missions, Japanese firms became aware of the Canadian ability to supply, not only forage, but also corn seed, particularly for Hokkaido where corn is an important forage crop.

Market Considerations

The availability of land and the variable climatic and soil conditions in Canada which permit the production of a

variety of seed cultivars, and the fact that Canada exports seed to 30 countries in total quantities of up to 70 per cent of the annual production in some years, is an indication of the strength of the Canadian seed industry. An excellent research program, designed to produce disease resistant and high quality seed, also keeps Canadian seed products competitive. Since 1950 there has been a marked increase in the varieties and kinds of forages available to Canadian farmers. Most dramatic has been the development of hybrid corn varieties, and more recently of a short season type of soybean.

Canadian varieties are not agronomically suited to all countries. While Canada produces hardy seed for northern climates, such varieties may yield less in milder climates than varieties bred for those specific conditions. In order to do well under Canadian conditions, seed must be early maturing and winter hardy, and these characteristics are generally inversely related to yield. This places Canadian seed producers at some production disadvantage compared with U.S.A. suppliers.

The Competition and Competitor Activity

Canada's main competitors in seed are the U.S., Australia, New Zealand and the EEC. In Japan, the U.S. dominates the market through their long association with the Japanese seed industry and a well developed program of market development. The U.S. is the dominant forage grass seed exporter to Japan, supplying approximately 2,600 tonnes worth $3.2 million in 1977. The next two largest suppliers are Denmark and New Zealand. The U.S.is a major supplier of fescue, timothy, red clover and orchard grass seed. Denmark is also a large supplier of orchard grass seed, while New Zealand is the major supplier of clover seed other than red and ladino.

The Action Plan **(For contacts see Appendix II)**

The major objective of market development activity will be to continue efforts to convince the Japanese trade of Canada's ability to supply, on a continuous basis, high quality forage seeds at competitive prices. The following activities are planned:[1]

i) Incoming missions to Canada of Japanese officials are planned as a follow-up to the Forage Crop Seeds Association and the Japanese Ministry of Agriculture visits to Canada in the summer of 1982. **(DOJ/FPB)**

[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

ii) Future marketing initiatives will focus, on a more intensive basis, on those segments of the Canadian trade most capable of providing seed agronomically suitable to Japanese conditions, as well as those firms most capable of expanding their contract multiplication activities with Japanese seed companies. **(FPB)**

iii) Direct involvement in the market by individual Canadian seed firms and encouragement of visits to service the market, using PEMD as appropriate, will be encouraged. **(FPB/CROs)**

Dehydrated Alfalfa

The Opportunity

Japan has no dehydrated (dehy) alfalfa industry and is one of the world's major importers of alfalfa products for use in compound feeds. Total Japanese feed production in 1980 was 22.5 million tonnes, an all-time record. There have been some shifts in the patterns of compound feed usage over the past decade; consumption of poultry feed has declined (from 56 to 47.6 per cent), while swine and beef cattle feed demand have increased.

Dehydrated alfalfa is used in compound feeds in Japan for three reasons. It is a natural source of carotene which colours the feed and is an important pigmentation element. The Japanese consumer prefers both egg yolks and broiler meat to be dark in colour. Alfalfa contains a so-called Unidentified Growth Factor (UGF). Although not yet scientifically proven, Japanese farmers realize that alfalfa is an important factor in maximizing poultry and livestock growth. Recent efforts have been made to identify uses of dehy alfalfa in beef and dairy rations where UGF (i.e. rumen by-pass) can be a major factor in improving dehy alfalfa's competitiveness with respect to corn. Finally, as a protein source, alfalfa represents another opportunity to minimize dependence on any one feed ingredient.

Despite these advantages, the use of dehy alfalfa in compound feeds in Japan has declined significantly over the past decade. Consumption in 1970 was 412,000 tonnes, or 2.7 per cent of total feed ingredients utilized. By 1980 it had declined to 317,000 tonnes, representing only 1.4 per cent of total feed ingredients. Although many benefits of alfalfa as a feed material are recognized, the decreasing use is primarily an adverse reaction to the relatively high cost, compared with low price grains such as corn and grain sorghum, which account for about 63 per cent of all ingredients used for compound feed production.

Table 13:

Japanese Dehy Alfalfa Imports, 1970-1981

Country	1970 *Vol.	1972 Vol.	1974 Vol.	1976 Vol.	1979 Vol.	1980 Vol.	1981 Vol.
U.S.	451	330	241	145	119	123	114
	**(93.6)	(75.5)	(62.8)	(44.5)	(33.1)	(40.2)	(46.0)
Canada	16	58	97	118	203	156	106
	(3.3)	(13.3)	(25.3)	(36.2)	(56.5)	(51.0)	(42.7)
New Zealand	3	18	24	49	32	22	17
	(.6)	(4.1)	(6.2)	(15.0)	(8.9)	(7.2)	(6.9)
Australia	11	9	11	8	-	-	-
	(2.3)	(2.1)	(2.9)	(2.4)	-	-	-
Other - Asia	-	5	4	6	-	-	2
	-	(1.1)	(1.0)	(1.8)	-	-	(0.8)
Other - Europe	1	10	-	-	-	-	-
	(.2)	(2.3)	-	-	-	-	-
Other - Americas	2	7	-	-	-	-	8
	(.4)	(1.6)	-	-	-	-	(3.2)
Totals	482	437	384	326	359	306	248

Legend: * volume in '000 tonnes
** per cent of total market figures appear in parentheses ( ).
Source: Japan Ministry of Finance: Export and Import Statistics

The Canadian Industry

Dehydrated alfalfa production has increased nearly seven-fold since 1966. The increase has been almost entirely in western Canada, which currently accounts for nearly 90 per cent of Canada's dehy production. Saskatchewan and Alberta, primarily produce dehy for export, most of which goes to Japan.

Alfalfa products are used as a high protein component of animal feeds and normally take the form of either dehydrated alfalfa pellets (usually artificially dried but including some sun-cured or naturally dried), or larger sized alfalfa cubes. Until the mid-1970s the main product of dehydrated alfalfa was meal. However,, in order to eliminate some of the dust problems associated with the handling of this product, a further processing step was

introduced to force the meal into pellets. Dehy pellets make up the largest portion of alfalfa exports to Japan, although there has been some recent interest in alfalfa cubes, mainly for the feeding of dairy cattle.

There are now approximately 35 processing plants in Canada with the largest ones located in the western provinces. During the late 1960s to early 1970s, the industry with government encouragement built twelve new dehydrating plants in western Canada. Another eleven plants were added between 1972 and 1975. Recently growth in production has been levelling off, due to low product prices, higher processing costs, and some rationalization by Canadian industry. This was caused by low alfalfa crop yields due to unfavourable weather conditions.

The industry is virtually 100 per cent Canadian and employs approximately 850 people (many on a part-time basis) in Saskatchewan and Alberta alone. The production of these two provinces was approximately 230,000 tonnes with a total value of nearly $30 million in 1980.

Marketing is accomplished through three major marketing organizations, i.e., NEPCAN (Neptune Agriculture Commodity Storage Limited), TAG (The Alfalfa Group) and KAPTAL. Most plants are associated with one of these three organizations and a few operate independently.

Canadian Marketing Activity

Approximately 75 per cent of Canada's dehydrated alfalfa production is exported, with Japan purchasing almost 85 per cent of the annual export volume (approximately $24 million out of total exports of $28 million). Exports to Japan began about 1972 and increased rapidly to a record high in 1979. The remaining 15 per cent of exports go to the F.R.G., the Netherlands, Hong Kong and Taiwan, with a small volume shipped occasionally to Venezuela, the Caribbean and the United States (mostly local border trade). With the high degree of dependence on the Japanese market, the industry is very vulnerable to competitor thrusts in that area. Export market diversification must become a major priority for the industry, to strengthen its export marketing base.

Over the past 12 years, exports have increased fifteen-fold, from 16,000 tonnes in 1970 to over 200,000 tonnes per year in 1979. As Table 13 on page 127 indicated, the market share for Canadian products in Japan has increased from 3 per cent in 1970 to nearly 60 per cent in 1979, displacing the United States as the major supplier that year.

This success was due primarily to competitive pricing by individual plants and the export marketing organizations and lower Canadian fuel costs. Both provincial and Federal involvement is needed in the industry to encourage a strong export marketing thrust. Governments have in the past actively participated with the industry on both the domestic and international fronts. Many of the plants in western Canada have received either Federal (DREE) or provincial government assistance to become established and to continue operations.

The three marketing groups, provincial and Federal Government officials, have made repeated trips, often with PEMD assistance, to Japan to promote the nutritional advantages of Canadian alfalfa and the importance of Canada as a reliable supplier. The most recent technical mission in May 1981, organized with PEMD "R" assistance, conducted a series of seminars in Japan. The industry in both Saskatchewan and Alberta mounted a joint effort in explaining new research findings to the Japanese in relation to the use of alfalfa products in livestock feeding.

The Japan Feed Council has made an annual tour of Canada for the past three years to view, among others, the dehy alfalfa industry and the role which the product plays in Canadian livestock feeding.

Marketing Considerations

Pricing is of paramount importance in the successful marketing of the Canadian product in Japan. The U.S. faces higher costs of production due to substantial increases in charges for natural gas (for dehydration), land values (southern California), and transportation costs. Canadian exporters must pay higher transportation charges, but fuel and land costs have risen more moderately here. The Japanese demand for dehy alfalfa is a function of the import price for corn.

Consistent quality is another key factor in the Japanese market. This has been a problem at times for the Canadian industry, since no uniform government standards are enforced. However, generally speaking, the Japanese have been satisfied with the quality of the Canadian product and disputes have been resolved in a satisfactory manner.

Delivery time is critical in the Japanese market, since their feed mills rely on a constant supply of whole product, and their storage capacity is limited. If supply is interrupted it can result in lost market opportunities, as mills are immediately forced to source from another country to avoid shutting down feed manufacturing facilities. Delivery time has also proven to be a problem for the Canadian industry. Congestion difficulties have been

encountered in moving grain and other products from the Prairies to the Port of Vancouver, and in loading at Vancouver.

Saskatchewan and Alberta have large tracts of land available for the production of raw material at very competitive prices. In some years, however, weather can cause havoc. Recently the area has experienced droughts, and in 1981 production of alfalfa was down because of winter kill in the northern parts of both provinces. Limited climatic conditions also mean that fresh raw material is available for only four to five months of the year. Sun-cured alfalfa is processed by the plants to reduce down-time during periods when fresh cut alfalfa is not available.

Due primarily to Canada's climate, research has been heavily oriented toward the problems associated with winter kill. New varieties are on the verge of being introduced commercially. These may prove to be more resistant to our climatic conditions and give greater yields and better consistency from year to year.

Researchers at the Lethbridge Research Station in Alberta, are attempting to integrate crop management practices with cultural, biological and chemical insect control methods. Efforts of this nature by agricultural research establishments in Canada play a vital role in ensuring that a high quality alfalfa is available on a consistent basis for industry plants.

The dehydration industry is a heavy energy user. Since the early 1970s natural gas prices have increased steadily and are likely to continue to do so. Availability of gas in western Canada has not been a problem to the extent that it has affected the dehydration industry in the United States and Europe. This has enhanced the Canadian competitive position considerably. While Canada still maintains a competitive edge in energy costs, the extent to which industry is able to adopt energy-saving technology could affect Canada's future competitive position in world markets.

The transportation of bulk commodities, like dehydrated alfalfa products, can add significantly to the export cost of the product. Dehydrated alfalfa must compete not only with grain as a source of protein in feed rations but also for railway car space and coastal storage.

Since the Japanese have no domestic industry, tariffs and non-tariff barriers are not a factor in the marketing of this product to Japan. However, with no domestic industry, the Japanese must be well aware of all the available sources of supply. They follow market developments closely, and Japanese trading companies, as well as the

feed industry, are quite familiar with Canadian capabilities, problems and strengths.

The Competition and Competitor Activity

Competition stems from the U.S. and New Zealand with some supplies coming from the People's Republic of China. The U.S. presently holds 33 per cent of the market, New Zealand 9 per cent and China 1 per cent. Japanese importers, however, use the importation of acacia leaf meal from China as part of a strategy to keep Canadian prices down, even though acacia leaf meal is, from a nutritional point of view, inferior to Canadian alfalfa. The U.S. industry is well represented in Japan through the American Dehydrators Association. They employ full-time marketing sales representatives who visit customers regularly, provide samples for feeding trials at universities and government research stations, give scholarship money for graduate students to conduct research into utilizing the product in the market, hold technical seminars, organize missions and undertake problem-solving, in other words, a full range of support activities to the industry. They also provide excellent after-sales service.

The Action Plan[1] **(For contacts see Appendix II)**

The industry, from an export marketing point of view, faces two major areas of concern. Firstly, it needs to capitalize and consolidate its position in the Japanese market. Canada has won, through a fractured and uncoordinated marketing approach, three-quarters of the Japanese market. With a concentrated, co-ordinated, and well laid-out market development plan over a four or five year period, an even larger share of this market is possible. The Japanese market was captured mainly on price, which has overridden quality, delivery, performance factors and an unsophisticated marketing approach. Secondly, the industry is highly vulnerable, as Japan represents the one major market for such a large portion of the Canadian production. The industry thus needs a well co-ordinated plan for market diversification.

Continued strong leadership by the Federal Government, in close co-operation with provincial efforts in Saskatchewan and Alberta, is required.

The exporting plants need to be encouraged to work together under the umbrella of an association which will help them to achieve their export promotion objectives.

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

In order to maintain this momentum, continued emphasis will be placed on animal feed promotion. Under this program, the following activities are planned:

i) The Dehy Alfalfa Seminars in Japan and the Saskatchewan Dehy Research Mission, both in May 1982, will be followed-up in subsequent years. **(Post/FPB)**

ii) The Department of External Affairs will continue to give strong support to Japanese animal feed missions to Canada, such as the National Co-operative of Feedstuff Wholesalers and the Japan Feed Council, whereby industry officials have the opportunity to observe production and research facilities. **(DOJ/FPB)**

For further information on forage seeds and dehydrated alfalfa contact the Food Branch, DRIE or the Department of Agriculture (see p.235)

Peat Moss

The Opportunity

The total market for peat moss in Japan is approximately 18,000 tonnes of which about 8,000 tonnes is imported. Canada enjoys the major share (approximately 97 per cent) of the imported peat moss market. The peak usage periods are March-May and September-November, and traditionally most importers have contracted twice a year just prior to these high usage periods. Recently there has been a shift to spread purchases more evenly throughout the year. The traditional end users are: rice nurseries (30 per cent), landscaping/roadside maintenance (30 per cent), horticulture (30 per cent), and other (10 per cent). The traditional end user has been horticulture, however, in recent years nursery and landscaping have emerged as new areas of application. In the long term, rice nursery usage is expected to decline as a consequence of the government policy to reduce rice production.

Canadian Marketing Activity

Historically the Japanese peat market has been served by Canadian east coast peat moss producers. In 1980, due to a poor harvest on the east coast, many western exporters successfully exploited this market. A few of the active eastern and western exporters are Northshore (New Brunswick), Western Peat Moss Ltd. (British Columbia), Baycroft (Alberta), Langeley (Alberta).

Some end-users of peat moss have recently explored the direct buying route, but the vast majority of the imported product follows the traditional importer/wholesaler/end-user path.

Market Considerations

The only impediments to exports in this market are quality and price, although the latter has not been a major problem for the larger producers. Quality requirements are strict, the Japanese demand low levels of foreign matter and moisture. Only well-dried, low foreign material peat moss should be considered for this market. Other characteristics such as absorbancy, pH, etc., must also be controlled, they can generally be worked out bilaterally with the importers. Transportation costs to Japan represent approximately 50 per cent of the total price of the peat moss.

Most Japanese importers prefer the 6 cubic foot packaging but since most western, and some eastern Canadian producers, do not package larger than 4 cubic foot bales, consideration must be given to shipping the larger-sized bales.

Action Plan[1] **(For contacts see Appendix II)**

With Japanese peat moss imports expected to continue to grow, Canadian producers will have to maintain their present market share. The following initiatives are planned:

i) Canadian producers will have to make an effort to better accommodate Japanese baling requirements and to continue to provide a product of consistently high quality. **(RIB/Post)**

ii) Well-organized technical and marketing missions with government support need to be continued. Canadian producers should, on their own, continue to frequently visit their Japanese customers. **(Post/RIB)**

For further information on peat moss contact the Resource Industries Branch, DRIE **(see p. 235)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

6. MARINE INDUSTRIES

For the purpose of this paper, the Marine Industries sector is made up of two industrial groupings, each of which is dealt with separately. The first section, Ocean Industries, deals with opportunities, and an overview of market development activities in the Japanese offshore/ocean industries market. The second section, Ship Component Parts and Ship Repair, deals with trade opportunities in the ship repair and ship component parts sub-sectors, and the nature of the market opportunity in a Canada/Japan industrial development context.

6a. Ocean Industries

The Opportunity

It is generally accepted that the ocean industry in Japan includes all commercial and scientific activities taking place in the oceans, with the exception of fishing and marine transport (the latter is dealt with in the subsequent section).

As an island nation, Japan throughout its history, has had a driving interest in mastering the oceans as a future source of basic necessities, food, energy, minerals and living space. Japan has developed a strong domestic ocean industry, but a huge market potential for foreign suppliers remains. There are also significant areas in which Japan lags behind Canada in ocean technology.

In 1979, the total ocean industry market in Japan was approximately $2.1 billion, which could be broken down as follows:

Table 14:

Japanese Ocean Industry Market, 1980

Sub-sector	$ million	Pct.	% Change 1979-80
Resource development (oil and gas equip.)	1,200	56.3	168
Ocean research (underwater, survey)	318	14.8	9
Civil engineering (platforms, vessels)	245	11.4	(28)
Ocean space utilization (transp. and storage)	220	10.2	(7)
Pollution control (survey and cleaning equip.)	56	2.6	(24)
Ocean safety	55	2.6	(6)
Diving equipment	28	1.3	12
Ocean energy usage	9	0.5	28
Other	7	0.4	-
Totals	2,138	100.0	45

Note: Numbers in ( ) indicate a percentage reduction from 1979 to 1980.

A further delineation of the market indicates that over 60 per cent of the entire demand is generated by third countries; commercial end usage is second (approximately 30 per cent) and public sector usage is third highest in overall demand.

Given the relative strengths of Canadian technology, (see Table 15 below) the relative weaknesses of Japanese technology in this sector, the nature of foreign competition and other Japanese development priorities, it would appear that Canada's efforts could best be directed at the area of ocean research (communications equipment) and resource development (oil and gas drilling and production equipment). Secondary emphasis should be given to pollution control and diving. The service sector (consulting engineering and services) holds great potential for Canadian firms, as software needs are high throughout most of the ocean industry sector.

The Canadian Embassy conducted a survey of potential end-users in Japan, of trading firms representing Canadian ocean industry products, and of the Japan Ocean Industry Association, for the purpose of providing a basis for a best prospects marketing plan. The matrix following is the result of the data obtained.

Table 15:

Matrix of Japanese Ocean Industry Market Prospects for Canadian Firms

Ocean Industry Category	Mkt. size	Jpn.'s Strong points	Strong points	Fut. growth	Bilat. issues	Other[1]	Cdn. Point Total
Ocean research	++	++	+++	++	+++	+ -	12
Resource devel.	+++	-	++	+++	+++	--[2]	8
Pollution	+	+ -	++	+++	++-	+ -	6
Diving	-	++	+++	++	+ -	+ -	6
Ocean space	++	--	+	+++	+ -	--	2
Safety	+ -	+ -	+ -	+	+ -	+ -	1
Civil eng.	+++	---	+ -	+ -	+ -	+ -	0
Energy	--	+ -	+ -	++	+ -	+ -	0

Legend: +++ strong positive factor (best market prospect)
++
+ positive factor
+ - neutral
- negative factor
--
--- strong negative factor (worst market prospect)

1: includes other foreign competition, Japanese government priorities for development of domestic technology

2: reflects the fact that purchasing is often controlled by third country customer

The Canadian Industry

The ocean industries sector consists of companies which manufacture equipment or provide services for all commercial and scientific activities in the ocean; (marine transport and traditional fishing support equipment and services are excluded).

At present, the major Canadian domestic market is in the exploitation of offshore oil and gas. During the last decade, the Canadian industry has grown in size, output and technological expertise. In that time, equipment such as sub-sea production systems, sub-sea surveying systems and manned- and remote-controlled submersibles, has been developed and marketed internationally.

There are approximately 240 companies in Canada in what is termed the ocean industries sector. Fifty of these are core group companies who depend on this market for the majority of their revenues. These companies have the following distinguishing characteristics: sales of low volume/high value custom-engineered products and services, employment of highly skilled people, Canadian-owned, high ratio of R&D costs to annual sales, and a long lead time from product inception to actual sales.

Canadian industry has developed capabilities across a broad spectrum of offshore and ocean technology requirements, mainly in response to expected expenditures for the exploitation of domestic east coast and Arctic hydrocarbon discoveries. Within this spectrum are the following specific capabilities that are already world-proven, both as to technological competence and commercial viability: hydrographic and seismic survey systems (underwater deep-towed systems and aerial hydrography); oceanographic survey systems (expertise and equipment for data acquisition in all aspects of oceanography); sub-sea vehicles (manned, unmanned, tethered and autonomous); technology and research capability in cold water and ice conditions; and sub-sea well completion systems.

The remaining 190 secondary companies have either sold products or intend to manufacture products for the ocean industries market. Their principal output is currently directed toward traditional land-based and marine markets. These companies range in size from a few employees to large multinational companies with several thousand employees. There is a third group of companies offering products or services with applications in the ocean industries. This group includes metal fabricators, helicopter operators, catering services, warehouse services, drilling materials suppliers, etc. A large number of these companies are located in eastern Canada.

Sales of the core group companies totalled approximately $600 million in 1980, of this about $30 million represent export sales. The secondary group of companies had sales of about $300 million in that same year, of which $15 million was to export markets.

The domestic market has increased from practically nil in the late 1960s to about $750 million by 1980. It is expected to increase to over $5 billion by 1990, largely due to activities taking place off the east coast and in the Arctic. The Canadian domestic market is seasonal in nature, and it is essential that Canadian companies develop an export capability.

Canadian export experience to date has been limited. Although Canadian technological advances are being made, intense international marketing efforts will be required to exploit them. The world export market exceeded $8 billion in 1977 and is expected to reach in excess of $20 billion in 1985. Canadian exports in general are expected to grow at an accelerating rate in step with our growing capabilities and the expanding international market.

Canadian Marketing Activity/Success Stories

About 10-12 Canadian ocean industry companies have been active in the Japanese market. Canadian successes have been primarily in the ocean research field (specifically sonar communications), and in data gathering systems and underwater technology. Initiatives by Canadian firms in the pollution control and diving equipment areas have also elicited positive reactions. C-Tech Limited of Cornwall, Ontario, has sold high quality underwater sonic devices and Guildline Instruments Ltd. of Smiths Falls, Ontario, has been successful with its high quality, precision instruments and data collection systems.

Success in the Japanese market can be attributed to perseverance, technical excellence, careful choice of target markets, competitive local representation, vigorous involvement by the Canadian firm and a long-range commitment. Canadian companies have penetrated those areas where the Japanese industry has not been interested in developing the appropriate expertise, or where Canadian technology is decidedly superior. For example, companies such as Arctec Canada Ltd., Guildline Instruments, Huntec Ltd., Lavalin Group and others all have gained excellent reputations in Japan. Support for these companies has been provided most prominently through exhibitions at the Canada Trade Centre (CTC) in Tokyo, which resulted in annual sales in the $1-2 million range in both 1979 and 1980. At the November 1981 CTC show, ocean industry exhibitors and agents reported about $250,000 sales on-site, with another $2-3 million in sales anticipated

over the next 12 months. The CTC has been a useful tool for the companies, giving them introduction and entry to a select market, providing contact with management in customer firms at lower cost than other promotional efforts. In view of the small size and limited resources of many core companies which are interested in Japan, the cost of marketing is an important factor at the present time. PEMD in this sector has largely been used in support of attendance at CTC shows.

Marketing Considerations

In this high technology area a competent agent is a necessity in Japan. In the resource development sector, significant amounts of the total demand were at one time specified outside of Japan (i.e. in U.S.), this trend has begun to lose importance.

Tariffs are not significant in this sector. Freight transportation, however, tends to be an important market consideration. Few non-tariff barriers exist, since safety and environmental matters are regulated, and such regulations are written and administered to favour the domestic industry. The pollution control and diving sub-sectors are most directly affected.

In high technology areas, such as the ocean industries sector, which Japan considers of strategic importance, massive funding for development projects is often provided for Japanese companies. In one instance, a Canadian firm saw its immediate opportunity for sales of sub-sea production systems disappear when the Japanese Government opted for the development of the same technology as a national project by a Japanese firm.

Competition and Competitor Activity

Domestic competition is strongest in electronics/ instrumentation areas and weakest in resource-related areas. Foreign competition, principally from the U.S., is strong in the latter area and leading edge technologies have the best chances of success. Price elasticity is generally low, and firms do not usually approach the Japanese market with a view to making quick profits.

The Action Plan **(For contacts see Appendix II)**

As Canadian capabilities in the high technology disciplines are specific and narrow, it is recommended that the industry carefully examine them in relation to the Japanese market. High technology target areas which recommend themselves for careful analysis are: a) hydrographic and seismic survey systems, b) oceanographic survey systems, c) sub-sea vehicles and d) cold water

technology. The area of sub-sea well completion systems, although a Canadian strength, is not recommended for Canadian firms as Japanese industry intends to develop its own technology and equipment.

The size of the Japanese market, and the Canadian capacity to supply, will limit any Canadian penetration in this high technology field. Any major thrust into the Japanese market will depend on a broadly co-ordinated plan, based on Japanese access to Canadian hydrocarbons and their exploitation. Such a plan would develop from negotiations with Japanese industry and would be co-ordinated with Canadian industrial development plans. It would include: access to the Japanese market; use of Japanese technology and expertise by Canadian companies; the use of Canadian equipment and machinery builders as sub-contractors to Japanese systems builders; and agreement to the use of joint ventures and other co-operative efforts for contracts, both in Canada and in third countries.

In addition to the on-going support of the Commercial Division of the Canadian Embassy in Japan and that of the Aerospace and Marine Branch, the following activities will be undertaken in the next two to three year period:[1]

i) Hold annual Ocean Technology Exhibitions at the Canada Trade Centre in Tokyo. **(DOJ/AMB)**

ii) Encourage ocean industries missions to Canada to concentrate on offshore hydrocarbon technology and equipment, and to provide exposure to larger bilateral projects such as the Beaufort Sea Project and various other LNG proposals. **(Post/DOJ/AMB)**

iii) Promote the participation of Japanese buyers in major offshore oil and gas exhibitions in which Canada is represented, e.g. OTC Houston, Aberdeen Offshore and Singapore Offshore. **(Post/AMB)**

iv) Follow-up the intent of the Canadian Ocean Industry Association (COIA) and its Japanese counterpart to begin holding regular meetings for possible bilateral co-operation. **(AMB/Post)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

6b. Ship Component Parts and Ship Repair

The Opportunity

Specialized services and equipment will enjoy the greatest potential for success in the Japanese market e.g. bulk cargo self-unloading equipment, steering gear, helicopter haul-down systems and replenishment-at-sea systems. For ship repairs, the most likely opportunities would involve the sale of ship repair services to Japanese vessels trading between third countries and Canada. For such ships, because of their travel schedule and trading route, it may be more cost effective to have repairs carried out in Canada. Similar opportunities would involve Japanese vessels lying idle in a Canadian port while waiting for room at a loading berth; and Japanese fishing vessels plying their trade under license in the Canadian economic zone.

Ship's components of superior technology represent the best opportunities. Securing a permanent niche in the market will be difficult as the Japanese are more interested in acquiring manufacturing licensing arrangements and other forms of access to technology than they are in purchasing manufactured goods.

Arrangements currently under consideration with respect to oil and gas exploration and development in the Beaufort Sea could provide a significant opportunity for the Canadian shipbuilding/ship repair sector. The arrangement would involve the shipment of liquified natural gas (LNG) from British Columbia to Japan, and the development in Canada of a new shipyard to build ships and other required marine exploration and service equipment.

Other situations worthy of sustained market development effort relate to vessels under construction in Japan for Canadian owners. Japanese shipbuilders are actively involved in building vessels for Canadian shipowners and offshore exploration and development companies. Any equipment preferences the Canadian owners may have could form part of the construction contract. Accordingly, the successful influence on Canadian owners would, no doubt, pay off.

The Canadian Industry

The Canadian shipbuilding/ship repair industry consists of approximately 30 principal establishments: 22 of these operate a combined shipbuilding/ship repair yard and have some involvement in industrial steel fabricating and heavy machining. Eight firms specialize in ship repair. Suppliers of services, component parts and equipment include another 50 to 60 establishments which operate in

close association with the industry. The industry is internationally competitive in the construction of specialized vessels such as icebreakers, specialized product carriers, self-unloading bulk carriers, offshore supply vessels and jack-up oil rigs, etc.

There are ship repair yards at each of Canada's principal ports capable of carrying out a full range of repairs and providing dry docking for vessels up to about 80,000 dead-weight tonnes. Ship parts manufacturers dealing with Japan enjoy their most competitive advantage with such products as bulk carrier self-unloading equipment, replen-ishment-at-sea equipment and helicopter/hold/haul-down systems which, because of specialized technology developed here, are only available from Canada.

Canadian Marketing Activity/Success Stories

Various shipbuilders, ship repair yards and manufacturers of ship equipment have pursued sales in Japan over several years. The successful situations have involved highly specialized products with a limited Japanese demand (i.e. insufficient to make manufacturing in Japan a viable proposition).

Market Considerations

Tariffs for ship parts are generally in the 5.5 to 6 per cent range. Japanese Government policies and financial support to the shipbuilding industry enable it to develop and maintain highly productive facilities and flexible pricing policies to meet pre-determined operating objec-tives. A Japanese preference for utilizing their own ship repair yards, and a requirement that all SOLAS (Safety of Life at Sea) and other ship safety equipment be inspected by Japanese surveyors, tends to secure ship repair work for Japanese domestic or overseas-owned repair yards. Only specialized ship parts, or licensing arrangements related to manufacturing in Japan are likely to gain market entry.

Competition and Competitor Activity

Japan's dominance in worldwide shipbuilding (50 per cent of the market), combined with its ability to develop cohesive trade and industrial policies, creates a situation in which its competitors are limited. South Korea, Singapore, Taiwan, Poland and Yugoslavia have recently quoted lower prices for ships.

The Action Plan **(For contacts see Appendix II)**

Firms requiring a more detailed understanding of opportun-ities for their products in the Japanese market will, no

doubt, want to conduct their own research into each specific situation. Assistance toward this end is available under the Program for Export Market Development.

Any action plan for the sale of ships' components to Japan or the rationalization of shipbuilding/ship repair between Canada and Japan, will require government persuasion.

Activities related to the sale of equipment for vessels to be constructed in Japan for use in offshore exploration and production will be co-ordinated by the Office of Industrial and Regional Benefits (DRIE). This office has been established to maximize benefits to Canada from mega projects underway in this country, and its efforts are directed towards ensuring Canadians have an equal opportunity to supply goods and services. The following industrial/market development activities[1] will be pursued:

i) Examine the feasibility of co-operative arrangements with certain Japanese ministries for the repair of Japanese vessels. **(Post/AMB)**

ii) Conduct a market identification of the potential for ships' parts and formulate plans for selling parts and equipment for vessels under construction in Japan. **(AMB/Post)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on the ocean industries and ship component parts and ship repair sectors, contact the Aerospace and Marine Branch, DRIE (see p. 235)

7. AUTOMOTIVE PARTS

The Opportunity

The Japanese automobile industry experienced tremendous growth with an average annual increase of over 9 per cent between 1970 and 1979. In late 1979 and 1980 worldwide demand for fuel efficient small cars enabled the Japanese automotive industry to become the largest producer of motor vehicles in the world. As the automotive parts industry is complementary to the auto assembly industry, its growth has been equally dynamic in both the original equipment manufacturers (OEM) market and the replacement market.

The Japanese motor vehicle industry, or OEM market, consists of 11 assemblers - Toyota, Nissan, Mitsubishi Motor, Toyo Kogyo (Mazda), Honda, Isuzu, Daihatsu, Suzuki Motor, Fuji Heavy Industries, Hino Motor and Nissan Diesel. It produced 9.64 million vehicles in 1979 and 11.04 million vehicles in 1980.

Since 1969, major motor companies attempted to reorganize component manufacturers within groups to make the industry internationally competitive. The 171 motor component companies were classified into 11 groups, one for each automobile manufacturer. With few exceptions, the component manufacturers in any one group are dependent on a particular assembler for most of their sales. Members of a group sell most of their output to their 'parent' automobile company, which in return gives advice, supplies credit, capital and machinery as well as technological licensing. In this sense, motor component manufacturers are captive companies. Approximately 80 to 85 per cent of their $18 billion production is absorbed by their OEM parents.

In 1980, Canada imported automotive products from Japan valued at $830 million and exported auto products worth only $9 million.

The expansion of the auto parts market in Japan is related to the demand for parts used in assembling new cars. However, the repair or aftermarket is also expanding with the growing number of cars on the road. In Japan, the aftermarket equals only 10 to 15 per cent of the total auto parts market, which is small in comparison with the 40 per cent that it represents in the American and German markets. Nevertheless, the value of the Japanese aftermarket is estimated at approximately 2 trillion yen (about $9.1 billion) per year. Factors such as the increase in the life-expectancy of the Japanese car, drop in the significance of the new car as status symbol and the resulting expansion in the used car market, suggest that the replacement parts market will grow even more rapidly than at present.

The replacement parts market consists of two segments, genuine parts and non-guaranteed parts. Genuine parts carry the brand name of the respective car manufacturers. These are produced to the car maker's design, are mostly sold directly to the auto maker, and are distributed through the car makers service network. These parts are seldom distributed directly by the parts manufacturer through its own sales network or through wholesalers. These latter outlets tend to concentrate on parts having a high turnover rate; thus, parts carrying the genuine label have easy access and quick acceptance in the aftermarket. Non-guaranteed parts are those parts which are equivalent to genuine parts but do not have the stamp of approval of the auto maker. These tend to be less expensive and are distributed through wholesaler outlets and marketed through gasoline stands, auto shops, Do-it-Yourself (DIY) stores, etc.

Potential business opportunities also exist for Canadian auto parts manufacturers as a result of the decision of several Japanese auto companies (Honda and Nissan) to establish manufacturing facilities in the U.S. With the close family-type relationship that exists in Japan between manufacturer and parts suppliers, several Japanese parts suppliers are also considering investment in North America. The Canadian parts industry therefore has two additional opportunities: supply U.S. facilities of Japanese auto makers or carry out joint efforts (technical or marketing) with such Japanese parts firms for the purpose of supplying the Japanese and other auto makers located in the U.S. To meet these goals, the Japanese Auto Parts Industries' Association (JAPIA) and the Automotive Parts Manufacturers' Association of Canada (APMA) have discussed a possible sistership relationship.

The Japanese domestic sales environment in the auto parts industry was generally stagnant in 1980. The demand for Japanese-built cars continued to increase sharply in all countries however, and on the whole the Japanese auto industry made considerable progress. Japanese vehicle manufacturers have been establishing assembly operations in countries in which sales of their vehicles have been successful (i.e. Nissan in the U.S.). As a result, there is not expected to be an increased demand for OEM parts in the Japanese domestic market. Aftermarket opportunities however, are expected to grow over the next two to three years.

The Canadian Automotive Parts Industry

The automotive industry in Canada can be broken down into three distinct groups: the vehicle manufacturers, the original equipment parts manufacturers (OEM) and the aftermarket parts manufacturers (AM). There is some overlap between these groups, with vehicle manufacturers producing parts in-house and with certain parts manufacturers producing for both the OEM and AM. About 50 per cent of automotive parts production

is carried out in-house by the vehicle manufacturers. About 20 per cent of parts production by independents is carried out by subsidiaries of eight large multinational corporations (Borg-Warner, TRW, Budd, Kelsey-Hayes, Eaton, Rockwell, Bendix and Hayes Dana). The remaining 30 per cent is produced by approximately 2,000 companies across Canada, often small and Canadian owned, who manufacture the aftermarket parts. Of the manufacturing establishments, 85 per cent of the companies are in Ontario, 10 per cent in Quebec and the balance mostly in the Prairie Provinces and British Columbia, with very little activity in the Maritimes. The Ontario firms are mostly in the Toronto-Windsor area and account for about 95 per cent of the production of aftermarket parts.

Canadian auto parts production was valued at over $6 billion in total. Production of aftermarket parts was worth about $670 million. Over 80 per cent of all parts produced were exported, largely to the U.S. The parts industry, while limited to a certain extent in the range of products that it manufactures, is internationally competitive, and sells its products throughout the world.

The automotive parts industry has traditionally produced parts for the North American market. This orientation changed in the last few years and OE parts are now also being marketed in Japan and Europe in limited quantities. A growing number of companies are developing proprietary products or processes which will help them compete internationally. Some companies with proprietary products, which have been extremely successful in selling to offshore manufacturers are Tridon (wipers), Duplate (windshield glass) and Varta (batteries).

Canadian Marketing Activity

Since 1973, ITC has been actively involved in the promotion of the sale of auto parts to Japan. Canada participated at the Tokyo Motor Show on a national basis four times (1973, 1975, 1977 and 1979). Two Automotive Parts Shows were held at the Canada Trade Centre in 1979 and 1980. The CTC shows served to introduce Canadian parts manufacturers to this market, and the contacts which were established are still being pursued. Two Japanese parts missions visited Canada in 1976, and since 1978 various senior officials have visited Japan for the purpose of auto industry promotion: most notably Minister Horner, August 1978; Mr. Reisman, August 1978; Ontario Industry Minister Grossman, May 1979; Minister Gray, August 1980; and Minister Lumley, June 1981 and March 1982.

In the fiscal year 1978-1979, the Canadian Embassy in Japan conducted a survey of the major Japanese auto makers to determine what type of parts the latter would not consider purchasing seriously from overseas suppliers. As a result of this survey, it was recommended that Canadian efforts be directed to non-functional or add-on automotive parts. Subsequently,

it was recommended that for the OEM market, the parts suppliers approach the auto maker directly or, in the case of Nissan, through its related trading house - Nissan Trading Company, which was established to purchase overseas auto parts.

Currently, over 100 Canadian manufacturers are supplying their products to the Canadian operations of Japanese auto companies to fill replacement and option requirements in Canada. In 1981 sales exceeded $11 million. Sales of Canadian auto OEM parts to Japan were approximately $4.6 million in 1979. At the May 1979 meeting of the Canada/Japan Businessmen's Co-operation Committee (CJBCC) the Japanese participants announced that auto parts purchases from Canada would double in 1980. Actual results in that year were $9.4 million, but 1981 purchases dropped to approximately $6 million, mainly due to the shut down in the production lines of the Honda Accord for its model change.

In February 1981, nine Canadian parts manufacturers participated in a joint venture mission to Japan. While no arrangements were finalized, excellent dialogue was generated which is expected to lead to at least two Canadian joint ventures. The companies involved have been diligent in their follow-up, and although the process is slow, successful conclusions are expected.

Canadian Success Stories

Three Canadian firms have managed to penetrate the auto parts market in Japan. Combined sales in 1979 topped $6 million and increased to $8.5 million in 1980. Duplate (glass) has concentrated on the OEM market, while Tridon (wipers and hose clamps) and Champion (spark plugs) have been successful in both the OEM and aftermarket. On a dollar basis, Duplate has been the most successful.

Canadian General Tower, Tamco, Gabriel and Magna have been actively pursuing business in Japan and are all close to culminating that business. A number of other Canadian companies have had spot sales in the Japanese market (Certified, Trim Fab, Abex, etc.), these however, have been small and generally on a one order basis.

Market Considerations

The purchase of parts from overseas suppliers is not free from problems for the auto maker and parts supplier. The family concept described earlier and Japan's "KANBAN" production system, under which parts suppliers are required to deliver only specified parts to specific places of the assembly at appointed times to minimize assembly plant inventory levels, pose immense hurdles for interested Canadian suppliers.

In addition to these local conditions, the cost of purchasing overseas motor components tends to be higher than that of domestic equipment because of additional charges for freight, communication, inspection, etc. In general, there is no duty on auto parts if they are exclusively for automotive use. In other cases, it is not excessive (6 to 9.2 per cent) and as such it is not considered a serious deterrent to trade. As most Canadian parts are re-exported in assembled vehicles, the main benefit of a zero tariff is the saving in administrative costs incurred under Japan's in-bond processing system.

Another limiting factor is the auto makers' desire to use overseas parts only in the production of export models. With the domestic market representing about 50 per cent of production, this effectively cuts the potential parts market for overseas suppliers in half. The quality of overseas components and less reliable delivery terms are major concerns of the purchasing staff of Japanese motor companies. Overseas suppliers are also at a disadvantage in the supply of functional parts, particularly relating to the engine, where close collaboration is necessary between parts suppliers and motor companies from the onset of the development of a new car and quality is of paramount importance.

The withholding of Japanese parts specifications, and an unwieldy parts approval system, which can at times take up to three years, are also trade impediments.

From a Canadian perspective, one of the problems is to encourage Canadian parts suppliers to become seriously interested in penetrating the Japanese market. The firms mentioned previously have made, and continue to make, the extra effort required to sell to the largest auto parts market in the world. It demands a long-term commitment to the Japanese market.

The Competition and Competitor Activity

In addition to strong domestic competition and price, quality, delivery and research and development problems, Canadian auto parts suppliers face stiff foreign competition from the U.S. and Europe. Both the EEC and the U.S. have been very vocal in their complaints about the penetration of Japanese automobiles into their domestic markets. The Japanese are trying to mollify these concerns by voluntarily limiting their exports to Canada, the U.S. and the EEC, and increasing parts purchases from both EEC and U.S. suppliers. This, in turn, will cut into potential opportunities that could exist for Canadian parts companies.

Overseas motor component suppliers, particularly from the U.S., Canada, Britain and France have been actively promoting sales to the OEM market. Promotional instruments include direct contact with individual motor companies, holding

exhibitions in Japan, organizing missions to Japan, and inviting staff of Japanese motor companies to their respective production premises to demonstrate their products, plants and expertise. Specifically, recent U.S. pressures resulted in the Japanese industry sending an automotive purchasing mission to that country. As a result Japanese motor vehicle companies purchased $120 million worth in 1980, and 1981 purchase figures are expected to reach $300 million.

With tremendous overseas pressure for Japan to react to EEC and U.S. concerns, some sources anticipate that the amount of overseas parts procurement will soon reach about 10 per cent of the total purchase of parts and components by Japanese motor companies. However, others anticipate that, because of the Japanese automotive family, the size of overseas parts procurement will not exceed 2 to 3 per cent from its current level of about 1 per cent.

The Action Plan **(For contacts see Appendix II)**

Within the next 3 to 5 years, it is essential for the Federal Government to encourage the Canadian industry to maintain a sustained marketing campaign with Japan's auto makers, both in Japan and in North America. Japanese auto companies must be encouraged to visit Canada on a regular basis. The point has been reached where the Canadian Auto Parts Manufacturers Association (APMA) and the Automotive Industries Association (AIA) should begin to lead the marketing offensive, with less direct government involvement. Consideration should be given to providing government support to the APMA and AIA to enable them to carry out these marketing promotional activities. Continued use of PEMD and the Canada Trade Centre (CTC) shows will also be encouraged. Success in meeting the above objectives will depend on finding dedicated Canadian auto parts suppliers interested in pursuing these opportunities. Canadian auto parts manufacturers should consider establishing their positions as qualified suppliers to Japanese auto makers in Canada (i.e. Nissan Canada, Toyota Canada) and then utilize such credits as leverage to open up the Japanese replacement and OEM markets.

The action plan for the automotive parts sector will include the following activities in the near term:[1]

i) Joint venture missions: ITC actively promoted, to both the Japanese and Canadian automotive parts industry, the concept of carrying out joint efforts (technical and marketing) in North America, as well as in Japan, as a

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

means of satisfying the long-term objectives of the parts industries of both countries. Following upon the visit of Minister Gray in August 1980 and the Joint Venture Mission in February 1981, active promotion of the concept of Business Opportunities in Canada will be continued with the Japanese parts industry. **(Post/STB)**

ii) APMA-JAPIA sistership relationship: This is seen as the key to the cementing of joint efforts. While the Canadian parts association (APMA) is receptive to a limited dialogue, visits etc. with JAPIA, it is pragmatic enough to realize that its membership cannot accommodate JAPIA on the large scale to which the latter is accustomed. JAPIA's staff resources, accommodation facilities and financial resources exceed those of APMA. However, APMA is interested in maintaining a rapport with JAPIA and assisting small groups of JAPIA members on their visits to Canada.

In the past, ITC sponsored various promotional activities in Japan on behalf of the industry. In the future, it is hoped that APMA will take a more active role, perhaps with PEMD assistance, in encouraging member companies to pursue business opportunities in Japan. **(STB/Post)**

iii) Investment in parts facilities: Major raw material suppliers (i.e. aluminum/petrochemicals) generally quote North American or world prices to Japanese auto manufacturers prepared to process those raw materials in Canada. This has proven to be an obstacle in efforts to encourage Japanese automotive investment in Canada. The Japanese assume that lower energy or feedstock prices which these suppliers enjoy in Canada will also benefit Canadian-based customers. Any significant improvement in Canadian material prices would facilitate promotion of Japanese investment. **(Post/STB)**

iv) Canadian company visits: In both the original equipment and aftermarket industries, Canadian auto parts companies should be encouraged to visit and become known to the Canadian and American personnel of the Japanese vehicle manufacturers, in addition to the Japanese personnel. **(STB)**

v) Expanded Automotive Components Remission Order (EDRO): To encourage increased parts exports, ITC made a concerted effort to interest Japanese auto makers active in Canada to join the EDRO Program. Five of the six Japanese vehicle importers active in Canada now operate under Type II Orders (Suzuki has yet to apply). The Federal Government's, Ontario's and the auto industry's efforts will continue to be required to interest Suzuki and Mitsubishi Motors in the Order, (the latter if its Chrysler connection is terminated); and to interest Honda and Nissan, and possibly Toyota, to apply for a Type I

Order when they establish plants in the U.S. This objective can be accomplished through regular visits to the Japanese auto makers. **(STB)**

vi) Canadian companies will continue to be encouraged to utilize PEMD to participate in trade fairs (e.g. the Tokyo Auto Accessories Show) and to visit, on an on-going basis, prospective Japanese customers. **(DOJ/CROs/STB)**

For further information on the automotive parts sector contact the Surface Transportation Branch, DRIE **(see p.236)**

8. COAL

The Opportunity

Imported thermal coal is one of the major pillars of Japanese energy policy which seeks to reduce the country's high level of dependence on imported crude oil.

Japan has limited coal resources. Rationalization of Japanese coal production has been taking place for the past 20 years, and annual production dropped from 55 million tonnes in 1960 to 20 million tonnes in 1980. For social and political reasons the industry is expected to be stabilized around present production levels. In 1981, output was reported at 17.5 million tonnes. Japan has no coal exports.

In August 1979, the Ministry of International Trade and Industry (MITI) published its forecast for long-term energy supply and demand, which would, inter alia, see alternatives to imported oil provide 50 per cent of the energy needs of Japan by 1990. MITI forecast a very rapid increase in thermal coal imports from 0.95 million tonnes in 1977 to 22 million tonnes in 1985, and to 53.5 million tonnes by 1990.

In 1982, however, there was a slump in thermal coal demand in Japan and in many other parts of the world in keeping with general economic activity. At the present time some Japanese projects have been delayed. Many of the 1979 MITI figures for imported coal requirements for 1985-1990 have now been revised, effectively pushing back the target dates by 5 to 10 years.

In the long-term, it is the electric power industry that will account for the major part of Japanese demand for thermal coal. The nine private regional power utilities, and the government-controlled Electric Power Development Corporation (EPDC), have set out an ambitious industry plan for new coal-fired electric power generation facilities based on imported coal. The share of coal as an electrical generating fuel is forecast to increase from 3.7 per cent in 1979 to 9.5 to 10 per cent by 1995.

Indicative of the electrical power industry's commitment to the expanded use of thermal coal was the industry's decision in January 1980 to establish the Japan Coal Development Company (JCDC) to co-ordinate the industry's imports of thermal coal. By 1995, it is expected that JCDC could account for about 50 per cent of the utilities' total imported coal procurement, most of this from projects in which JCDC will have equity participation.

Total imported thermal coal demands for 1995 are currently forecast at approximately 53.5 million tonnes per year (tpy), up from roughly 12 million tpy in 1981. From Canada's perspective a target of a 20 per cent share of this market would seem reasonable compared with our present 10 per cent market share. (This would represent about $600 million in 1981 dollars and prices.)

Japan is also the world's leading importer of coking coal for steel production with imports approaching 60 million tonnes per year. Steel production is currently down, but is expected to increase to 1976 levels (about 115-120 million tpy) by 1985. Canada is unable to influence an increase in Japanese steel production levels, but it is reasonable to expect to raise the Canadian share of Japan's coking coal imports.

The Canadian Industry

Canadian coal resources are in a reasonable position for export, but are poorly located to serve Ontario, the main region of domestic demand. As a result, coal is exported from Canada's east and west coasts and is imported from the U.S. into Ontario. (See Table 16)

The coal industry includes two main sections: (i) coking or metallurgical coal for steel works; and (ii) thermal coal for power stations and industrial uses (particularly cement) where heating and drying are involved. In thermal coal, delivered BTU content is the main pricing feature, and in the past, transportation costs have determined the primary market areas.

Canada has extensive resources of good quality thermal and coking coals which are surplus to forseeable domestic requirements. Total Canadian reserves of all types of coal are about 200 billion tonnes, with perhaps 10 per cent economically recoverable at present. Each year new records in production and trade are set. In 1980, coal exports were 14.3 million tonnes, of which 90 per cent was coking coal. Japan bought 72 per cent of Canada's coal exports.

Alberta and British Columbia producers have accelerated their exploration and development activities. The expansion and improvement of Canadian port and rail facilities is taking place to meet the recent expansion of world demand particularly for thermal coal. Government policies, at both the federal and provincial levels, are positive towards the further development of Canadian coal resources for export. There are no restrictions on Canadian coal exports, and this policy is expected to continue.

Table 16:

Canadian Coal Production and Trade, 1979-1981

(million tonnes)

	1979	1980	1981
Production	33.0	36.5	40.1
Imports	17.5	16.0	14.2
Total	50.5	52.5	54.3
Exports	13.8	14.3*	16.3*
Apparent consumption	36.7	38.2	38.0

Legend: * 1980 exports were valued at $793 million, 1981 exports at $1,030 million.

Source: Statistics Canada

Canadian Market Development Activity

Japan is the principal market for Canadian coal. In 1981 Japan imported 10.5 million metric tonnes of Canadian metallurgical coal, valued at approximately $590 million, and about 1 million tonnes of thermal coal. In the last few years, several Canadian producers have concluded medium and long-term supply contracts with Japan including some with Japanese equity participation.

In 1981, six major new Canadian metallurgical coal mine openings and expansions were announced; they are scheduled to come on stream in 1983-1984. The companies involved are from Alberta and British Columbia, and include some new producers from the northeast British Columbia region. These projects will provide over 10 million tpy, which at current prices are worth $700 million annually.

The JCDC and others are also considering equity participation and procurement from Canadian thermal coal projects. At least 12 Alberta and British Columbia companies are negotiating in Japan and elsewhere, and no less than four medium-sized thermal coal contracts were signed in 1981 for deliveries starting between 1982 and 1985. The estimated value of the signed contracts is over $200 million.

Thermal coal trade with Japan is quite new, and Japanese imports are forecast to increase more than ten-fold in the 1980s. New producers will be coming into the market and new

contracts will be signed. As a result, there will be intensified competition both internationally and among new Canadian mines to obtain supply contracts for Japan.

All western Canadian coking producers have major long-term contracts in Japan, and are well connected with the steel companies. The producing and developing coking companies are doing feasibility work in preparation for sales negotiations in Japan and other markets. The coal trade is highly organized, with NKK and Kobe Steel in Japan acting as the chief co-ordinators for Canadian coking coal sales to Japanese steel companies. Increases in Canada's coking coal sales will consequently only take place in step with overall increases in Japanese steel production.

Canadian and Japanese researchers continue to discuss technologies for converting Canadian coals into liquid fuels. The eventual establishment of liquefaction plants in Canada to supply Japanese requirements could offer longer term promise for the emergence of new markets for Canadian coal in Japan.

Market Considerations

The Japanese government maintains an import licensing system for thermal coal imports, the purpose of which is to enable the Japanese domestic coal industry to maintain its current level of production and supply. The licensing requirement would not however, affect future market growth which must be met from imported coal, and is therefore not considered a market impediment.

The Japanese government has provided a number of incentives to promote both imports of thermal coal and the financing of overseas coal development projects.

Environmental and siting problems associated with the development of new coal-fired power stations could however result in significant delays in commissioning new facilities, and consequent delays in the coal import plans of some of the power companies.

Canada is seen as a stable, long-term source of supply. Canadian coal exports however are greatly dependent on the ability of Canada's rail and port facilities to handle an increased volume of exports. There are some concerns in Japan over trends in Canadian transportation and infrastructure costs, Canadian manpower availability, and the application of FIRA policies with respect to Japanese equity participation in thermal coal projects in Canada. Canada, however, continues to welcome minority equity investments in coal projects.

Competition and Competitor Activity

Australia is presently Japan's major source of both metallurgical and thermal coal supplying over 45 per cent of imports. The other major suppliers are the U.S., China, South Africa and the U.S.S.R. Australian coal has the advantage of favourable mining conditions, excellent quality and short inland transportation distances. However, the Japanese government has expressed concerns about the frequency of strikes and the bottlenecks at coal loading ports in Australia and is seeking to reduce its dependence on Australian coal.

In its efforts to diversify its supply sources, Japan has shown an interest in the large thermal coal reserves of the western United States. The coal-loading facilities in the western U.S. are presently considered inadequate for the foreseen large tonnages, however, new developments at U.S. west coast terminals are expected in the next five years.

China also has substantial coal reserves, and has the advantage of geographic proximity to Japan. However, Japanese companies are concerned about Chinese infrastructure developments.

Japan also looks to South Africa for increased thermal coal supplies. Although Japan is reluctant to become too dependent on this source of supply, 1981 showed a rapid increase in coal from this area. South Africa will remain a formidable competitor for Canada.

Similarly, Japan will continue to import thermal coal from the U.S.S.R. and others, but does not see them as major supply sources in the long-term.

The Action Plan **(For contacts see Appendix II)**

Canada's position as a stable source of coal supply should ensure Canadian suppliers of a reasonable share of the Japanese market. The Japanese desire to achieve stable supply through diversification of its supply sources, however imposes an upper limit on Canadian supply prospects for thermal coal. Between these limits (estimated at 12 per cent to 20 per cent of Japanese market requirements) is a discretionary range of up to 8 million tonnes per year, (about $500 million at 1981 prices) which could be influenced by the technical characteristics of Canadian coal deposits, the aggressiveness of Canadian industry, and Federal and provincial government policies.

Close co-ordination between the public and private sectors, and among different levels of government, will be required if this potential is to be realized in the face of highly competitive market conditions. The Canadian Embassy in Tokyo and

the Resource Industries Branch will continue to support the market development efforts of individual firms through normal market intelligence and assistance services. In addition, the following market support activities[1] are planned during the next two years:

i) A Canadian coal seminar in Japan in 1982-1983, with participation by industry, the Federal Government and several provincial governments, to increase the awareness of Japanese buyers of Canadian coal supply capabilities, infrastructure development, government policies, etc. **(Post/RIB)**

ii) A trade mission to Canada with representatives from the Keidanren Energy Committee, or similar auspices, and other private missions, to examine Canadian thermal coal and infrastructure developments. **(Post/DOJ/RIB)**

iii) Preparation of medium- and long-term analyses of the Japanese thermal coal market, to provide quantitative projections of Japanese requirements and their probable timing, as a guide to Canadian companies in planning their marketing strategies, and to governments in considering future infrastructure needs. **(Post/RIB)**

iv) Continuation of high-level contacts with Japanese organizations and the encouragement of the formation of joint ventures. **(Post/RIB)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on the coal sector contact the Resource Industries Branch, DRIE or the Department of Energy, Mines and Resources (see p. 236).

9. NON-FERROUS METALS AND MINERALS

The Opportunity

The export of non-ferrous metals and minerals to Japan is a significant component of Canada's foreign exchange earnings and trade balance. The table below indicates that Canadian exports of these commodities in 1981 generated over 800 million dollars, which in turn represented almost one-fifth of Canada's total exports to Japan (approximately $4.5 billion) that year.

Table 17:

Canada's Non-Ferrous Metals and Minerals Exports to Japan, 1981

	($'000)
Aluminum ores, concentrates, scrap, metal and alloys	229,169
Copper ores, concentrates, scrap, metal and alloys	299,620
Ferro-alloys	18,627
Lead ores, concentrates, scrap, metal and alloys	25,081
Nickel ores, concentrates, scrap, metal and alloys	31,862
Precious metals in ores, concentrates, scrap, metal and alloys	112,010
Zinc ores, concentrates, scrap, metal and alloys	51,702
Other metals ores, concentrates, scrap	66,827
Total	834,898

Source: Statistics Canada

It has been a long-standing objective of Canadian commercial policy to promote the export of Canadian raw materials in more highly processed forms where this is economically viable. To date, little progress has been made in achieving this general objective with Japan. At present, over 75 per cent of Canadian non-ferrous metal exports are shipped in relatively unprocessed forms.

Japan has few indigenous non-ferrous deposits. Being highly industrialized, it must depend on imports from resource-rich nations. Canadian exports are mainly in concentrate form. Japan's enormous need for metals in the 1960s and 1970s, which world refineries were not then able to supply, led to the development of large domestic metallurgical facilities. The raw materials for these were supplied from areas in the world which at that time did not have a resource base large enough to support further processing facilities. Japan on the other hand has modern efficient smelters which have developed under favourable tariff and pricing practices.

Unlike consumer products, raw materials cannot create their own market. Depending on their degree of processing, potential customers are readily identified. With copper, for example, concentrate can be sold only to smelters and the smelter product in turn can be sold only to refineries. The refined metal can enter the consumer market through companies that produce semi-fabricated or fabricated products, mainly brass mills and rod mills. Customers are easily identified and in most instances seek out the seller. The number of customers for Canadian raw materials in Japan is therefore limited.

By appealing to the competitiveness of Canadian resource companies and their desire to maximize profits, the Japanese have been able to compete successfully for Canadian concentrate supplies. Canadian companies strive to show a maximum return on investment, and there have been no incentives for them to upgrade their products prior to export to Japan. In part due to the Japanese metal-pricing structure, it has been more profitable from an individual company's standpoint, to export material in raw form than to attempt the more difficult (and less profitable) marketing route of pursuing metal and fabricated product sales.

The present situation, while profitable for Canada in terms of trade, does not give the maximum socio-economic benefits which further processing could provide. Consideration will have to be given to the possibility of convincing the Japanese to restructure their buying patterns to accommodate Canada's further processing objectives.

In the past few years, the traditional trading pattern with Japan has shown signs of changing, and new opportunities for the export of more highly-processed minerals may result. In a 1978 report, the Japanese Industrial Structure Council (JISC) concluded that the economic strength of Japan's non-ferrous metal processing industry would decline under the pressure of increased energy and environmental costs, and the cost of land acquisition for new expansion. The JISC therefore recommended that the industry adopt a medium and long-term policy of offshore investment and increase imports of refined products. In April 1980, a 50 per cent increase in Japanese domestic tariffs on electricity, placed many power-intensive non-ferrous metal and minerals industries, such as aluminum, ferro-silicon and zinc under severe cost pressures.

The aluminum and ferro-silicon industries, for example, have been declared depressed industries. Japanese aluminum producers have traditionally relied on power generated by oil but with the energy crises in 1973 and 1979 costs escalated signi-

ficantly. Even with a 9 per cent tariff, Japanese domestic prices exceeded world aluminum prices, with the result that severe production cutbacks have been made and further cutbacks are planned. From an output of 1.64 million tonnes in 1973, production dropped to 700,000 tonnes in 1981. In order to assist Japanese aluminum smelters during the transition period to lower their production, the Ministry of International Trade and Industry (MITI) initially proposed that for a limited time period, the 9 per cent tariff would be reduced to 4.5 percent with the residual 4.5 per cent being used as a fund to assist in alleviating the industry's problems. With the most recent production curtailment, a new quota agreement has been developed under which 400,000 tonnes (duty free) of selected products would be imported by aluminum smelters each year.

As with aluminum, the production of ferro-silicon and silicon requires large quantities of electric power. With the increasing cost of imported oil, Japanese domestic production has become more costly than imports, with the consequence that the Japanese industry has become more sensitive to the inroads being made by foreign competition. Ferro silicon and silicon plants have been closed and capacity has been reduced. In the medium- to long-term, it is likely that other sectors will follow. Even in the less power-intensive sectors, Japanese companies are examining long-term investment opportunities in raw material source countries as a way of meeting their requirements for increased capacity in the future.

Canada is well-placed to benefit from these developments. As a major supplier of non-ferrous metals and with a financially and technically strong industry which is internationally competitive, Canadian companies could either develop new facilities or expand existing plants. In the past, Canadian companies utilized primarily guaranteed sales contracts with Japanese companies as a basis for developing raw material projects. The future of investment by Japanese firms in further processing facilities in Canada, either greenfield or existing, depends on the corporate policies of the Canadian companies as to whether they wish to pursue joint ventures with Japanese partners or proceed alone. The screening role of the Foreign Investment Review Agency (FIRA) and government policies on incentives for investment may also be important considerations.

The Canadian Industry

Non-ferrous metals and minerals exporting companies are large, many are multinationals and are among Canada's largest companies. Each of the major commodities is discussed individually.

Copper

Canada has been one of the world's largest mine producers of copper, ranking third behind the U.S. and Chile. It produced 710,000 tonnes, or approximately 12 per cent, of the total western world's production in 1980. In that same year, 40 per cent of Canada's copper concentrates from mine production were exported, and the balance was refined domestically. All offshore copper contracts for concentrate and refined copper are negotiated, and the pricing formula is based on the London Metal Exchange quotation.

There are two distinct copper industries in Canada. The eastern industry is dominated by four large companies in Ontario, Quebec and Manitoba; the western industry is located mainly in British Columbia.

Five eastern smelters treat the copper-bearing materials which are mined in eastern Canada and process them at three refineries in Quebec and Ontario. In British Columbia, the Japanese encouraged copper mine development through long-term sales contracts to the Canadian mining companies. These contracts were generous, leaving the Canadian companies with little incentive to further process to either the blister or refined copper stages.

Lead

Canada is the western world's third largest lead mine producer (after the U.S. and Australia) and the sixth largest producer of refined metal. In 1980, the value of Canadian mine output was $299 million of which 50 per cent was exported in the form of concentrates, and the remaining 50 per cent was refined domestically. Approximately 50 per cent of the refined metal was exported.

Mine production of lead is widely distributed across Canada. There are however, only two producers of primary lead (i.e. from concentrate), and they are located in British Columbia and New Brunswick. The major producers of secondary lead (i.e. from scrap) are located in Ontario and Quebec.

Zinc

Canada is the world's largest mine producer of zinc and the third largest refiner of zinc metal after the U.S.S.R. and Japan. Canadian mines currently produce approximately 20 per cent of the world's zinc, and Canadian refineries have the capacity to process 50 per cent of that production into metal. The value of Canadian zinc output in 1980 was $860 million.

Approximately 90 per cent of Canadian production is exported as concentrates or metal, and the remainder is consumed in Canada by metal processors. Mine production of zinc is widely distributed across Canada. There are four zinc refineries producing zinc metal located in Quebec, Ontario, Manitoba and British Columbia. In late 1981, the Noranda Group announced plans to construct a new 100,000 tonne refinery in New Brunswick, to begin full production in late 1984.

Aluminum

Alcan, the only Canadian-owned aluminum company, is a major multinational. Alcan in turn holds a 50 per cent interest in two substantial Japanese aluminum companies: Nippon Light Metal and Toyo Aluminum KK. Nippon Light Metal (NLM), the larger of the two, is engaged in refining alumina, smelting aluminum and fabrication. NLM in turn acquired an interest in Alcan's Kitimat operation, called Alpac, which converts alumina supplied by Japan to an annual volume of 45,000 tonnes of aluminum which is re-exported to Japan.

Ferro-silicon and silicon

Canada's production of these materials is from only three companies at four locations, all in the province of Quebec:

Company and location	Fe Si capacity	Si capacity
Union Carbide		
i) Beauharnois*	57,000 tonnes	7,000 tonnes
ii) Chicoutimi	22,000 tonnes	
Chromasco		
Beauharnois	40,000 tonnes	
SKW		
Bécancour	25,000 tonnes	25,000 tonnes

* Plant closed indefinitely in May 1982.

Available capacity is in excess of that required to serve the domestic market and Canada is therefore a net exporter. Union Carbide has optioned its production to Elkem of Norway (a major ferro alloy producer) and hence about 55 per cent of Canada's ferro silicon is not available for export to Japan at the present time. Also, Union Carbide's production at Beauharnois has been curtailed for economic reasons.

Molybdenum

Canadian molybdenum exports were negligible until the mid-1960s when nine of the mines presently in production in British Columbia were started up, mostly as copper mines with molybdenum as their prime by-product. Canadian output of molybdenum in 1980 was 13,452 tonnes, or approximately one-seventh of the world's production, a far second to the U.S. level of 88,153 tonnes.

Canadian shipments are in two forms, a concentrate enriched sulphide form and a roasted oxide form. The sulphide concentrates are predominant in Canadian exports to Europe. Noranda Sales Corp. is the major supplier. The oxide form is imported by the Japanese for direct consumption in steel-making. Placer Development Corp. is the traditional supplier.

Recent Canadian Market Development Activity

In the Spring of 1980, a British Columbia metals mission visited Japan to promote that province's advantages as a site for processing investment, particularly those requiring substantial energy inputs. This mission generated considerable interest on the part of Japanese industry, and feasibility studies have continued.

In May 1980, the Toronto-based consulting firm of T. Iwasaki and Associates completed a report on the competitive factors in the Japanese non-ferrous metallurgical industry and their implications for future facility development in Canada. This report gave encouragement to additional studies concerning further processing opportunities such as that carried out by the British Columbia Zinc/Lead Steering Committee which involved British Columbia provincial departments, Federal departments and a cross section of the companies involved in the world lead and zinc industry.

In September 1980, the Canada-Japan Joint Economic Committee agreed to establish a Working Group on Resource Processing. This Group has now held three meetings (March and November 1981 and April 1982). At the first two meetings, the Group discussed horizontal factors influencing investment in resource-processing facilities in Canada and Japan. Future meetings will focus specifically on the further processing of non-ferrous metals.

In March 1981, a non-ferrous metals mission visited Japan to examine Japanese experiences in the area of environmental controls, and other factors affecting the competitiveness of the Japanese smelting industry. This mission also provided Canadian government and industry officials with a much better understanding of the competitive position of the Japanese industry.

Market development activity in each of the commodity areas is highlighted below.

Aluminum

During 1980, the value of aluminum exports to Japan amounted to $241 million, of which primary aluminum ingots (125,000 tonnes) represented 84.8 per cent, scrap (22,000 tonnes) represented 14.7 per cent, and the remaining 0.5 per cent was in the form of semi-fabricated and fabricated products (678 tonnes).

As shown in Table 18 below, Canada's market share of Japan's aluminum imports has been declining from its peak of 40 per cent, which it reached in 1969, to its present level of 18 per cent. Nevertheless, exports have been increasing in volume terms in the past several years.

Table 18:

Japanese Aluminum Imports from Canada, 1969-1980

	Volume (MT)	Canadian share %
1969	127,448	39.9
1970	83,296	31.8
1971	85,655	37.2
1972	78,482	23.5
1973	79,610	15.8
1974	73,962	14.1
1975	48,333	12.0
1976	12,978	2.8
1977	67,416	12.1
1978	125,824	16.4
1979	108,811	14.5
1980	148,139	17.6
12 year average	86,663	19.8

Source: MITI White Papers on International Trade (1969-1978); MOF Japan Export-Import (1979-1980)

Copper

Canadian copper exports to Japan in 1980 (see Table 19) were valued at $356 million, of which 99 per cent (179,000 tonnes) was in the form of concentrates and the balance was in the form of copper and copper alloy scraps.

Exports of copper concentrate to Japan, which began in 1958 with 2,000 tonnes, have increased by 100 percent over a twenty-year period. Japan represents Canada's major export

market for copper concentrates (62 percent in 1980) even though it is a relatively small market for refined copper (2.1 percent in 1980).

Table 19:

Japanese Copper Imports by Country, 1980

(000 tonnes)*

	Concentrate		Blister		Refined	
	Vol.	%	Vol.	%	Vol.	%
Canada	705	23	-	-	5	2
Australia	152	5	-	-	4	2
Chile	194	6	9	15	35	15
Namibia	-	-	13	21	-	-
Papua New Guinea	292	9	-	-	-	-
Peru	58	2	23	38	24	10
Indonesia	157	6	-		-	
Philippines	919	29	-		-	-
Zaire	107	3	-		18	8
Zambia	-	-	-		131	58
South and Southwest Africa	-	-	15	24	-	-
Sabah	129	5	-			
United States	295	9	-			
Others	96	3	1	2	11	6
Totals	3,104	100	61	100	228	100

* Gross weight estimated to average 26.9 per cent copper content.
Source: Japanese Import Statistics

There are estimated to be 10 potential buyers of copper concentrates in Japan and approximately eight sellers in Canada, and they have developed a close working relationship over the years. The copper concentrate contracts usually run for three to four years or the life of the mine, and the volume is sometimes as large as the total production of a particular mine.

Copper concentrates will continue to be an important part of Canada-Japan trade in the long term, but is not expected to grow in the future at the same rate as in the past.

Ferro-silicon and silicon

During 1980, approximately 20,000 tonnes of ferro-silicon and 8,000 tonnes of silicon metal were exported to Japan, representing about 16 per cent and 13.6 per cent respectively, of Japan's total imports of these two materials.

Equity investment to date by Japanese firms in Canadian facilities has not been significant. There are, however, projects currently under discussion with Japanese firms which would increase Canada's ability to supply ferro-silicon. Three potential projects in British Columbia are: (1) Cominco/Mitsui project in Kimberley, (2) Mitsubishi/NKK, and (3) Sumitomo/SKW both in the Kamloops area of B.C.

Lead

In 1980, Canada shipped 61 per cent of its total lead concentrate exports (about 90,000 tonnes) to Japan. This in turn represented approximately 60 per cent of Japan's lead concentrate imports, which Japanese firms in turn used in the production of 305,000 tonnes of refined lead metal. It is expected that Canada's lead concentrates will hold their market share in Japan, because of Canada's ability to supply concentrates, the proximity of lead mines (i.e. B.C.) to Japan, and significant joint ventures in Japan. With surplus lead refining capacity in Japan however, there seems little prospect for an increase in lead metal exports from Canada, which are currently less than 3 per cent (1,000 tonnes) of Japan's import market.

Zinc

Japan is the world's largest importer of zinc concentrates, and obtains a larger share from Canada (approximately 30 per cent) than from any other country. Zinc concentrate exports (137,000 tonnes in 1978) should be able to maintain their present share of the Japanese concentrate market.

Molybdenum

Japanese imports of molybdenum have been made predominantly through the Japan Molybdenum Conference or Molykon, an association of ferro-molybdenum producers which was formed 20 years ago to ensure adequate, stable and reasonably-priced sources. However, since the abolition of tariff quotas on molybdenum, Molykon's role as importer has declined and that of the steel mills has increased.

Placer Development Co. has become the predominant Canadian supplier, shipping over 90 per cent of Canadian exports to the Japanese market. The following table indicates the variations in Canadian supply between 1977 and 1981. The drop off in Japanese imports from Canada in 1979 reflects the impact of the long strike at Placer's Endake Mine.

Table 20:
Japan's Molybdenum Concentrate Imports from Principal Sources, 1977-1980

(000 metric tonnes gross weight)

	1977		1978		1979		1980	
	MT	%	MT	%	MT	%	MT	%
Canada	7.7	47	6.3	37	3.8	21	6.2	31
U.S.	7.8	48	8.5	50	9.9	55	10.5	52
Chile	.7	4	1.9	11	3.2	18	2.5	12
Other	.2	1	.4	2	1.1	6	1.0	5
Total	16.4	100	17.1	100	18.0	100	20.2	100

Source: 1981 Ferro Alloy Manual (TEX).

The strikes at the Canadian mines in 1979 damaged Canada's reputation as a dependable supplier. As a consequence, Japanese clients have diversified their sources to other countries, thus reducing Placer's market share severely.New mines in other countries are coming on stream, and there are generally depressed market conditions. Molybdenum prices are therefore down and producers are cutting back production after having rebuilt inventories in 1980.

Market Considerations

The Japanese tariff structure allows for duty free entry of ores and concentrates, and imposes tariffs which increase with the level of further processing for most non-ferrous metals and their downstream products. The tariffs apply on a sliding scale which fluctuates with price movements.

There are several major non-tariff barriers which act as obstacles to both Japanese investment in mineral processing facilities and increased imports of metal from overseas. Japanese firms are concerned that increased imports could jeopardize the employment of Japanese workers in non-ferrous metal firms, particularly when such firms would have limited opportunities for alternative products. Some Japanese non-ferrous firms, under the combined pressures of increased costs and depressed markets, do not have adequate cash flow to make new large investments overseas, particularly considering their high capital cost. There is a strongly held view in Japan by both government and industry that basic materials should be produced in Japan for security reasons, and that reliance on

imports would create problems in maintaining quality and reliability. Some also contend that in the long-term, inflation outside Japan will tend to neutralize the present power-cost disadvantages which Japan is facing in the short to medium term.

Competition and Competitor Activity

The two major competitors to Canada, as sites for the further development of resource processing facilities are the developing and newly industrialized countries and Australia.

Indonesia, the Philippines and Brazil are raw material supplying countries which already benefit from Japan's more favourable GSP tariff structure. They are also areas of potential future competition for further processed metals and semi-fabricated forms. New investments in resource processing facilities in those countries can also benefit from Japanese economic assistance programs. Japanese consumers, who are generally concerned about political and economic instability, increasingly wish to ensure reliability of supply by sourcing from domestic producers. Weight is given in their investment decision-making process to source from more politically stable countries, i.e. Canada and Australia.

Australia can be seen as the main alternative to Canada as a site for resource processing investment. Australia offers low cost electricity, established non-ferrous metal raw material supply, political stability, and a rich and diversified resource base. Australia has already developed plans for major investments in aluminum smelting involving Japanese partners. A large portion of this output will be dedicated to the Japanese market.

The Action Plan **(For contacts see Appendix II)**

Promotion of increased investment and trade of non-ferrous metals in more processed forms is, of necessity, a long-term Canadian objective. Although short- and medium-term opportunities could exist in Japan in a few sectors, the Japanese non-tariff impediments are significant. Overcoming these and developing a more favourable Japanese consensus toward further processing in Canada will take time and will be difficult.

Established commercial links provide the best basis for building new relationships and trade patterns. It is essential that Canada build and enhance its reputation as a reliable supplier of raw materials. The Japanese should be encouraged to look to Canada for their incremental metal requirements. In some cases, the Japanese may be prepared to consider the replacement of some of their own production of those metals which have either a large energy content or where environmental considerations are a problem.

In the short term, the action program for this sector consists largely of continuing the existing range of activities[1] which include the following:

i) Monitor and report on industrial development and government policies both in Japan and Canada which may influence opportunities for increasing exports of further processed commodities and for upgrading resources in Canada prior to export. **(Post)**

ii) Maintain close contacts with both Japanese consumers and Canadian suppliers and promote Canadian policies on trade and investment leading towards further processing. **(Post)**

iii) Continue government-to-government dialogue through the Working Group on Resource Processing. An important objective is to provide suitable detailed information and data to stimulate greater interest in, and acceptance of, further resource processing in Canada. It will be necessary to keep the Japanese informed on the policies of the federal and provincial governments with respect to investment, resource development, and related export policies. **(Post/DOJ)**

iv) Continue to promote private sector dialogue through the on-going meetings of the Canada/Japan Business Co-operation Committee on the questions of further downstream processing and joint ventures. **(Post/DOJ)**

v) Seminars and missions can serve in the future to promote Canada's objectives in this area. However, the timing and character of such promotional activities needs to be carefully assessed against the background of the political and commercial climate in Japan. **(Post/DOJ)**

vi) Continue to promote dialogue in the federal/provincial and federal/industry spheres to develop shared goals on further processing. **(Post/DOJ/RIB)**

vii) Address key bilateral problem areas Japan has identified, i.e. FIRA, labour relations, etc. **(DOJ/RIB)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on the non-ferrous metals and minerals sectors contact the Resource Industries Branch, DRIE or the Department of Energy, Mines and Resources (see p. 236)

10. MANUFACTURED PRODUCTS

Overview

For the purposes of this report, the manufactured products sector is defined to include two main sectors: consumer goods and industrial goods. Each of these classifications and the related commodity breakdowns are discussed separately. Generally speaking, the consumer goods sector includes such products as clothing, jewellery, furs, sporting goods, sportswear and floor coverings. The industrial goods sector embraces those manufactured end-products not covered under other priority sector headings, namely health care products, instrumentation and aerospace.

In 1981, 4.0 per cent of Canadian exports to Japan were manufactured goods; in comparison, Japanese manufactured goods to Canada constituted 95.5 per cent of their total exports to Canada. Nevertheless, the Japanese market for manufactured goods still offers excellent opportunities for Canadian companies.

Whereas other sections of this plan have dealt with the market opportunity in fairly definitive terms, there are more opportunities and products in the manufactured goods sector than can be enumerated here. Consequently, the listing of opportunities in product areas is meant to be indicative rather than exhaustive. The market for individual manufactured goods, more than for other products, depends on factors which the exporter has to assess at the particular point in time. To satisfy the discriminating Japanese consumer, who has an excellent choice of domestic and imported goods at his disposal, manufactured products from Canada must either be of high technology or be of excellent design and quality.

Several encouraging developments concerning manufactured products occurred at the CJBCC meeting in Sapporo, Japan in May 1982. A major development was the initiative of Japanese business representatives on the CJBCC in establishing a Sub-Committee on Japan-Canada Manufactured Goods Trade Facilitation under the Japan-Canada Economic Committee of the Keidanren. The object of the sub-committee is the facilitation of Canadian manufactured goods exports to Japan, as well as the promotion of bilateral trade in manufactured products.

At present, Canadian manufacturers are examining the feasibility of establishing an office in Tokyo, with resident representatives, which would develop contacts for individual Canadian manufacturers and would work with Japanese organizations to resolve trade difficulties as they arise.

The Japanese Distribution System

The distribution system in Japan is often described by its major trading partners as being so complex as to constitute a non-tariff barrier to the entry of foreign products. There are, no doubt, complexities involved in selling in Japan, however, the intricacies of the distribution system depend on the type of product exported. The distribution networks for industrial goods and for consumer goods differ substantially, as noted below:

i) Industrial Goods: - In certain instances, the distribution of industrial goods follows the North American pattern - exporter to importer to end-user. As noted in the case of auto parts, where end-users are numerous, dealings with one or even two levels of wholesalers may be required to reach all the small outlets. The exporter must pay particular attention to follow-up service requirements. If the Japanese buyer has any reservations about the availability of spare parts and/or service, he will most likely buy a domestic product, even if the price is higher and the quality lower.

The exporter of industrial goods should consider any of the following import channels: a general trading company, a specialized trading company, a manufacturer of similar but not competing products, or his own sales office. Each of these channels has its advantages and disadvantages. Most exporters of industrial goods tend to choose a specialized trading company to sell and service their goods in Japan.

ii) Consumer Goods: - The distribution of consumer goods is generally more complex than that of industrial goods, but difficulties can be reduced by selecting specialized routes.

The retail system in Japan is characterized by a large number of small retailers. The share of retail sales held by large retailers therefore is still relatively low. (Approximately 65 per cent of all retailers have only one or two employees, whereas the 200 largest retailers in Japan account for only slightly over 20 per cent of total retail sales.) The potential exporter, although faced with such a widely dispersed retail network, is not at a disadvantage when compared with either the Japanese or a competing foreign manufacturer since all must deal with the same structure. Evidently, the distribution of an exporter's products to every outlet in Japan demands a large production capacity and the commensurate financial resources. The distribution system at its most complex probably involves the importer, primary wholesaler, secondary wholesaler and tertiary wholesaler before the goods move to the small retailer.

Most Canadian firms, because of limited resources, will of necessity, take a more modest approach to the Japanese market. Suitable marketing methods might be: direct sales to large scale retailers; use of general trading companies; use of small specialized trading companies; a tie-up with a major wholesaler; a tie-up with manufacturers of similar but not competing products, or the opening of a Japanese sales office. Whichever approach is selected, the exporter will need to do his market research thoroughly, which could well mean several market identification/awareness trips to Japan. The Canada Trade Centre in Tokyo has served as an effective vehicle for introducing exporters to the Japanese market.

10a. Consumer Goods

Consumer Products Overview

Japan is the world's second largest consumer goods market after the U.S. The Japanese market for such commodities as apparel, jewellery, accessories, knits and sportswear is estimated to be in the range of $50 billion. Imports account for approximately 5 per cent of that market (i.e. some $2.5 billion).

Long-term demand is expected to continue, particularly as consumer spending power increases with the entry of more Japanese women into the labour market. The Japanese consumer has a markedly strong preference for internationally-known brand names. (It is noteworthy that top Japanese designers such as Hanae Mori, Kenzo and Issey Miyake had to establish a name first in Paris and New York before becoming widely recognized in Japan.)

Canadian activity in the Japanese market for apparel, accessories and furnishings (i.e. floor coverings) has been concentrated in the high price and quality range. The lower end of the Japanese market will continue to be increasingly dominated by relatively low-cost products from newly industrialized countries, such as Korea, Hong Kong and Taiwan. Canadian, U.S., European exporters and Japanese domestic suppliers, will therefore be competing in the high end of the market where price sensitivity is outweighed by considerations of perceived quality. The cost of establishing such quality perceptions is relatively high.

Canadian manufacturers of consumer products have utilized Canada Trade Centre shows as a vehicle for introducing individual commodities (i.e. furs, jewellery, sportswear) to the Japanese market. Canada is perceived in Japan as a sports/wilderness destination and hence the Canadian consumer goods industry is seen in that light.

CTC shows have tended to focus on individual commodities and there has been little effort made to promote consumer goods as a group. Providing such a broad emphasis or a theme approach may require that the market development activity, as distinct from sales-related activity, emphasize homogeneous combinations of consumer products in a trade show. Sportswear and sports equipment are good examples of products that could be promoted in this way, simply because these products are bought and distributed through the same distribution networks in Japan. Another example is Canadian furs, jewellery, leather accessories, and designer fashions as components of high fashion. If Canada wants to establish a high fashion image in the mind of the Japanese consumer for Canadian-manufactured products, it must undertake such promotional efforts in the visual and print media. In that case, an actual trade show featuring all consumer good commodities together would not be effective, simply because the sales and distribution networks for all products are different. The major gain of such a promotional approach would be to broaden the individual consumer's image of Canada, to encourage the Japanese to regard Canada as a source of other than "traditional" consumer goods.

As noted in individual action plans for the consumer goods sectors, trade shows (mainly CTC), incoming buyers'missions and company visits to Canada for the individual commodities will continue to be the main promotional thrusts for the consumer goods sector in Japan. Nevertheless, a theme approach, as outlined above, would complement such market development efforts.

The theme approach can be considered as a form of demand-pull marketing. Since the Japanese consumer is the ultimate audience, the promotion instruments would be different from those used for the marketing/sales approach (i.e. CTC shows, missions). Such vehicles of promotion as missions by journalists, tourism publicity, public affairs presentations, retailer-to-retailer activities, are the different methods which could be used. The following is an outline of a promotion program* which, with private sector support, could complement the individual promotional efforts of Canadian consumer goods exporters to Japan:

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*For contacts see Appendix II

i) Encourage the strengthening of related associations in Canada in order to promote joint industry approaches. **(TCP)**

ii) Encourage competitive Canadian consumer goods manufacturers to pay repeat visits (minimum three times per year) for continued export growth. **(Post/TCP)**

iii) Arrange visits by Japanese journalists to Canada to provide them with exposure to Canadian furs, sportswear, jewellery, fashion knits and leather accessories. **(Post/DOJ/TCP)**

iv) Arrange seminars for Japanese importers/retailers, perhaps held at the CTC, in conjunction with other trade shows. **(Post/TCP)**

v) Encourage widespread industry-supported publicity in Japan through a consumer goods demonstration/advertising campaign. Canadian firms would be encouraged to share advertising costs with their Japanese representatives. **(TCP/Post)**

vi) Encourage Japanese importers/distributors to visit Canadian booths at major international trade shows. **(Post/TCP)**

vii) Encourage links between major department stores in Canada and their Japanese counterparts. **(Post/TCP)**

viii) Tie in Canadian tourism and public affairs programs with Japanese journalists' visits to Canada and provide a focus on Canadian lively arts, art education and design. The media coverage would be aimed at stimulating the perception of Canada as a destination for the traveller seeking urban vacation pleasures. **(Post/DOJ/TCP)**

ix) Encourage an enhanced program of media relations in Canada under which the editorial content of appropriate Canadian publications could be made available to the Japanese media. **(Post/DOJ/TCP)**

Fur Garments

The Opportunity

With its burgeoning economy and a growing sense of affluence, the Japanese market for fur garments is considered to have significant potential. The market, third largest in the world, is estimated to be worth $880 million. Imports are valued at $300 million. Domestic demand in Japan exceeds production capability, and imports will therefore continue to represent an important segment of the market.

Exports of Canadian fur garments to Japan could reach $30 million by 1985. The major opportunities for the industry are limited to the medium- to high-price range garments where the Canadian industry can be price, quality, styling and variety-competitive with other suppliers. This luxury portion of the market is highly competitive and represents about 10 per cent of total fur consumption in Japan. The selection of the appropriate distribution channel is limited because there are only 50 major wholesalers in Japan who handle the majority of the fur import business.

The Canadian Industry

The Canadian fur garment industry has about 335 establishments, employs approximately 2,600 people and is concentrated in Montreal and Toronto, which comprise 80 per cent and 15 per cent, respectively, of the industry. Industry shipments in 1980 were valued at $273 million.

Most of the firms are comparatively small and 90 per cent have sales of less than $5 million. Consequently, many do not have the resources or capacity to effectively service world markets.

About 40 per cent of the firms in the industry are actively engaged in export. Some of the larger and more aggressive firms have been exporting since the early 1970s, but many smaller firms are relatively new entrants and have been involved for only three to four years on a meaningful basis.

Europe, the major market for Canadian furs, absorbed 75 per cent, or $96 million worth of Canadian fur garment shipments in 1980. Japan and the United States are the other principal markets. However, with few exceptions, the industry has not concentrated to any large extent on these latter two markets.

Since the fur industry is all Canadian-owned and controlled, it enjoys freedom and flexibility in its export policies. Most of the larger firms are relatively efficient although considerable opportunities exist for technical upgrading.

During the next few years the industry's export growth is expected to level off, primarily because of intensified competition in foreign markets from other world producers, contraction in the demand growth rate, and the high cost of exporting.

Recent Canadian Marketing Activity

Generally, the companies exporting to Japan have been relatively well-established in the market for the past decade. There have been no significant new entrants during that time.

Table 21, page 176, indicates that $7.7 million in furs was exported to Japan in 1980, down from both 1978 and 1979 levels.

Most of the export initiatives to Japan have been carried out on an individual company basis. Although firms have utilized PEMD assistance to investigate and explore the Japanese market, there have been few instances of follow-up. However, some Canadian companies which regularly participate in international trade shows receive exposure to the contingent of Japanese buyers who regularly attend such events.

Three trade shows were held at the Canada Trade Centre in Tokyo (two in 1979, one in 1980). There have been no other structured or extensive promotional efforts. Recently, in order to obtain increased exposure for more Canadian manufacturers, five major Japanese buyers were invited to the Montreal Fur Fair in May 1982, and publicity was also distributed in Japan regarding the Canadian exhibit at the American International Fur Fair in New York.

Canadian Success Stories

The four Canadian fur garment producers exporting to Japan on any meaningful or sustained basis are: Amsel & Amsel Inc., Natural Furs Ltd., A & M Hurtig Ltd. and S. Kuretzky Furs Ltd. These companies have all been active in Japan for over 10 years, and account for an estimated 90 per cent of total Canadian fur garment exports to this market. In that time, these companies have spent considerable time and money in cultivating the Japanese market with aggressive and extensive export strategies which included regular visits, development of a sales structure and intensive publicity and promotion activities. In doing so, they have successfully established a presence, identity and reputation in Japan to the point where they are considered major suppliers.

Market Considerations

The major market impediments for Canadian firms in the Japanese market have historically been the lack of Japanese awareness of Canadian capability and an insufficient capacity in Canada to meet Japanese requirements. Since Japanese buyers have been exposed to only a very limited number of Canadian firms, primarily those which visit the market or attend international trade shows, they generally are not aware of the diversity and capability of the Canadian industry. Among Japanese consumers there is widespread ignorance of Canadian furs, primarily because they are not as well advertised as those of other countries, particularly those of the U.S.

Table 21:

Canadian Fur Exports to Japan, 1979-1981

($000)

	1981	1980	1979
Skins (undressed) subtotal:	1,434	783	2,282
includes: beaver	-	43	-
fox	785	190	832
mink, ranch	17	225	678
marten	71	9	109
muskrat	-	-	6
otter	4	-	17
rabbit	-	-	8
wolf, coyote	18	6	27
lynx	x	8	-
undressed, n.e.s.	537	302	605
Cuttings, scraps	6	9	40
Skins (dressed)	1,149	557	517
includes: mink	778	414	158
raccoon	137	42	98
n.e.s.	235	101	260
Apparel	13,194	6,407	11,128
includes: mink	5,083	2,111	3,725
n.e.s.	8,111	4,296	7,402
Total Furs	15,783	7,756	13,967

Legend: x Amount less than $500
Totals may not add due to rounding

Source: Statistics Canada

The Canadian industry generally enjoys a high reputation for quality, styling and variety. Those firms which are presently active in Japan have given Canada an image of prestige and product excellence. Companies which are not currently active in Japan, but which have the capability to be active, could transfer their experience in exporting to other markets to the Japanese market. The favourable relationship of the dollar to the Japanese yen, if altered in Canada's favour to any appreciable degree, could provide considerable scope for increasing exports.

The Competition and Competitor Activity

The Canadian industry's primary competition comes from the United States (14 per cent of the Japanese market), and to a lesser extent from Europe (9 per cent).

In 1980, there was some displacement of Canadian imports by those originating in the United States. Although Canada remains the third largest supplier of fur garments (after Hong Kong and the United States) its share of the total import market declined in 1980 from 1979, while that of the United States increased to 14.4 per cent in 1980 from 1979. This situation can be attributed largely to the fact that Canadian furs are not as well publicized or promoted as those from other countries. While the United States has been developing highly structured and extensive activities to exploit the Japanese market, the Canadian industry has been relatively inactive. As a result of this inertia, the Canadian industry's competitive position is being eroded. Both the U.S., under their EMBA identification, and the Scandinavian countries under their SAGA identifications, have well established quality images.

The Action Plan **(For contacts see Appendix II)**

To be viable in Japan it is essential that the Canadian industry seek greater exposure and establish a presence in the Japanese market. One of the constraints to be overcome is the Canadian industry's reticence to act co-operatively in the Japanese market.

To optimize Canadian objectives in the Japanese market, there is a need to heighten Canadian awareness of the market prospects for furs, increase the number of Canadian companies exporting to Japan, and develop an infrastructure to assist companies to establish themselves in Japan. Companies need to carefully assess the demands of this market in relation to their own capacity, resources and ability to persevere, in the Japanese market. The following promotional activities will be pursued during the next two years:

i) Missions to Japan, with 10 to 12 companies with export capability, are needed to develop a better awareness of the market (i.e. buying practices, retail structure and product demand). **(Post/DOJ/TCP)**

ii) Solo fur shows are planned at locations in Japan to accommodate 10 to 12 exhibitors. **(Post/TCP)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

iii) More Japanese buyers should be encouraged to visit shows in which there is significant Canadian representation such as the Frankfurt and New York Fur shows. **(Post/TCP)**

iv) The feasibility of organizing a consortium to promote and publicize Canadian products, identify market opportunities, act as a contact with retailers, provide credit information, and plan trade shows largely depends on the department's ability to encourage the industry to function collectively. **(TCP)**

v) In order to improve the industry's knowledge and awareness of market opportunities in Japan, publications on the Japanese market, as well as seminars, should be undertaken. **(TCP)**

For further information on furs contact the Textiles and Consumer Products Branch, DRIE (see p. 236)

Sportswear/Sporting Goods

The Opportunity

Since 1973 the Japanese market for leisure and sporting goods has grown significantly. The decline in the work week, together with rising incomes, has brought about an increase in expenditures on sportswear and sporting goods. The Japanese market for sporting goods was $2.35 billion in 1978 and is forecast to increase to $4.23 billion by 1985. Similarly, the sportswear market is expected to increase from $2.4 billion in 1978 to $5.67 billion by 1985. Growth is expected to be greater in the sportswear area than in sporting goods.

Imports of sportswear and sporting goods represent about one-quarter of the Japanese market for these goods. The Japanese consumer has a distinct preference for quality and brand-name products. Long-term demand is expected to peak in certain areas, such as down-hill ski equipment and tennis rackets, but to continue to grow in such items as cross-country ski equipment and squash. Demand for sportswear is expected to follow the same pattern.

Japan has about 15,000 specialized sporting goods outlets in addition to department stores and supermarkets. The distribution channel for commercial sporting goods consists of one intermediary who frequently plays an important role in organizing production and promotion of sales. Much of the retailing of sporting goods in Japan is done through the large department stores which have established reputations for selling high quality products.

The Canadian Industry

The Canadian sporting goods industry produces a very broad range of winter equipment, particularly ice skates, hockey protective equipment and figure skates, skis and ski accessories. For the summer market, the industry produces camping, hiking and mountaineering equipment, as well as fishing and other outdoor gear. The sportswear industry produces fashionable skiwear, winter outerwear, athletic garments (jogging suits, team jerseys, jackets, etc.) as well as summer outfits for tennis, swimming, and other sports.

There are presently about 180 establishments in the sports equipment sub-sector and another 120 in the sportswear sub-sector. While the majority of the firms are located in Ontario and Quebec (35 and 45 per cent, respectively), there are a number of equipment and garment producers in Manitoba, Alberta and British Columbia.

About 25 per cent of the $400 million of Canadian sports equipment shipments in 1980 was exported. In the sportswear sub-sector about 10 per cent, or $30 million, of the total production of $300 million was exported. Principal markets for both sportswear and sporting goods are the U.S. and Europe. The Scandinavian countries are the major markets for winter sports equipment and active sportswear garments. Other important markets are Australia for summer sports goods (i.e. camping equipment) and Japan for skiwear, hockey and other sports jerseys, après skiwear and team jackets. In particular, considerable export expertise has been developed by Canadian manufacturers of hockey equipment and team jerseys, as their products are sought by top teams around the world.

Canadian sports equipment and sportswear producers concentrate on the middle- to upper-quality range, leaving the lower end of the market to Asian suppliers. Superior designs and workmanship have won markets overseas for Canadian products,and have built a strong image of Canadian goods as solid, durable and stylish.

The Canadian sports equipment and sportswear sub-sectors are principally Canadian-controlled, the two major exceptions in the sportswear sectors are Adidas and White Stag.

Recent Canadian Marketing Activity

As shown in Table 22 on page 180, Canadian exports of sports equipment to Japan have increased rapidly in the past three years. Although apparel exports increased sharply in 1979, there was a slight decline in 1980.

Table 22:

Canadian Sportswear/Sporting Good Exports to Japan, 1977-1981

($000)

	Sports apparel	Sporting goods	Total sportswear/equipment
1977	159	888	1,047
1978	547	1,561	2,108
1979	1,473	2,754	4,227
1980	1,311	3,258	4,569
1981	1,173	4,187	5,360
Average 1977-1981	933	2,529	3,462

Source: Statistics Canada

Over the past few years a number of Canada's largest sporting goods and sportswear companies have established themselves in Japan, partly through initial contacts made with Japanese buyers in Europe, and partly through the world-wide demand for Canadian-made winter goods. Presently, the Japanese market for ice sports equipment is dominated by Canadian names including CCM, Cooper and Bauer.

The problems of distance, language and culture, previously deterrants to many small- and medium-size companies seeking to enter the Japanese market are now being overcome. Solo and group Canadian Sportswear/Sporting Goods Shows were held at the Canada Trade Centre in 1981 and 1982. The first show in January 1981 attracted 12 companies and established many contacts which were followed-up. On-site sales were $40,000. A second Sportswear/Sporting Goods CTC Show was held in January 1982 at which 27 companies participated and on-site sales increased to $400,000. The considerable assistance and simplification of market penetration made possible through the industry sector branch's market education program, the Canadian Embassy's support and guidance to the industry, and PEMD financial aid, have all provided strong encouragement to Canadian manufacturers in the Japanese market.

Canadian Success Stories

The Japanese have actively pursued ice hockey in recent years, and have demanded the world's leading brand names in ice hockey equipment, CCM and Bauer skates, and Cooper protective equipment. The Japanese consumer will pay premium prices for well-made, high style, quality products and prefers imported goods from either Europe or North America.

Similarly, Canadian fashion skiwear, some of which was first recognized by Japanese buyers at the Canadian stand at the Las Vegas Snow Show, has found a strong market in Japan. Canada's image as a cold, northern country in which sports people demand high style, enhances the reputation of our outerwear producers, who are considered in Japan as leaders in manufacturing warm, yet extremely stylish goods. In 1981, one Canadian company sold $500,000 worth of skiwear to Decente in Japan.

Market Considerations

Tariffs do not appear to be an insurmountable obstacle, particularly in sporting goods where the average tariff is 8 per cent, and in sportswear where it is 14 per cent. Although footwear imports are affected by quotas, athletic footwear is exempt.

An impediment in this market is the Japanese demand for brand names. Canada does not have famous international brand names in the sporting apparel goods market like Lacoste and Munsinger. In order to avoid focussing on brand names, Canadian sporting apparel manufacturers stress traditional Canadian quality, rather than the names of one or two companies. Individual company visits to Japan, along with repeated trade show participation, has been encouraged as a way of establishing company names in the minds of the Japanese buyer. The cost of establishing individual company brand recognition is beyond the financial means of most Canadian companies.

Competition and Competitor Activity

Principal competition for Canadian goods in the superior quality range comes from the U.S. and Europe. Major established name brands are in strongest demand in Japan, and therefore give advantages to those world producers. A U.S. sporting goods show in 1982 provided major U.S. firms, with internationally recognized lines, to exhibit their products in Japan.

The Action Plan (For contacts see Appendix II)

The objectives for this sub-sector can be realized through both direct promotional activities (i.e. trade shows, fairs and missions) and market awareness programs (i.e. advertising, seminars, publications, tourism links). Specifically, the following activities[1] are to be undertaken during the next two to three years:

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

i) As there is no alternative local Japan-wide sports show in which Canadian sports equipment and sportswear firms might participate, an annual CTC show is planned for January of each year. **(DOJ/TCP)**

ii) In order to publicize the CTC and its facilities to Canadian firms and to attract more sports firms, close liaison with the related trade associations and magazines in Canada will be continued. **(Post/TCP)**

iii) Common interest links between major department stores in Japan and their counterparts in Canada should be encouraged in order to better promote Canadian sporting goods/sportswear. **(Post/TCP)**

iv) Seminars for Japanese sporting goods/sportswear importers/distributors and sales personnel can be held at the Canada Trade Centre in conjunction with the annual trade show. Attendance should be promoted through various sales techniques such as audiovisuals, door prizes, etc. **(Post/TCP)**

v) Tie in the Canadian Government Office of Tourism's annual "Big Ski" promotion in Tokyo each year with Canadian ski industry manufacturers (skis, ski outerwear, accessories, après ski clothing) exhibits and shows. **(Post/TCP/CGOT)**

For further infomration on sporting goods/sportswear contact the Textiles and Consumer Products Branch, DRIE (see p. 236)

Jewellery

The Opportunity

The total value of the jewellery products market in Japan in 1981 was estimated at $5 billion, of which costume jewellery represented 25 per cent. The import market for jewellery on the other hand was $110 million in 1980. Imported jewellery products have been well-established with the Japanese consumer who is very brand-conscious. This has, in turn, led to a preoccupation with quality, status and style. Japanese consumers tend to believe that a high price means that the product is genuine and of high quality. Jewellery products in Japan are in demand not only for their own value but also as a status symbol of the affluent life. Trends in domestic consumption therefore indicate a favourable climate for the growth of imported jewellery products.

Prior to 1973, Japan restricted imports of gold jewellery to protect its own pearl industry. With the subsequent liberalization of import regulations, the previously untapped jewellery market became available to western manufacturers.

In Japan, the majority of retailers dealing with jewellery products also handle watches and eyeglasses. The jewellery products normally go through several stages of distribution before reaching consumers. The imports pass through primary wholesalers who are responsible for designing, polishing and other necessary work and then go to either watch stores, jewellery stores or department stores for retail sale.

The Canadian Industry

The jewellery industry (made up of costume jewellery, precious jewellery and silverware) is self-sufficient in terms of its ability to produce a wide range of jewellery and silverware products. Since Canada is a net exporter of gold and silver, the only significant raw material which must be imported to manufacture jewellery and silverware is gem diamonds. Although the Canadian consumer favours 10 KT gold jewellery, Canadian manufacturers have the capability to produce a wide range of products from 9 KT to 22 KT. Silver jewellery and silverplated hollowware designs and products are equal and, in some cases, superior to those of other industrialized producers.

As with most jewellery and silverware industries throughout the world, the Canadian industry has been traditionally characterized by a large number of small plants, 95 per cent of the establishments employ fewer than 100 employees. These produce about 50 per cent of the total output. There are approximately 6,600 workers employed in about 378 companies. In addition, another 11,000 are employed in the wholesale and retail distribution channels of the industry. The majority of the firms are located in Ontario (44 per cent) and Quebec (38 per cent). British Columbia, with 9 per cent of the total firms, is the only other area of any significant concentration.

The vast majority of companies are privately owned, and are either owner- or family-operated. Foreign ownership, mainly U.S., is approximately 5 per cent in the precious/costume jewellery sub-sector, 37 per cent in the silverware industry, and 60 per cent in the secondary refining industry.

In 1980, the industry produced over $300 million worth of finished jewellery and silverware, of which $24 million worth (8 per cent) was exported. This compares very favourably with the U.S. industry which exports less than 5 per cent of its finished jewellery and silverware.

Principal Canadian export markets include the U.S. and Britain, representing 27 and 23 per cent respectively of Canada's exports, and the Caribbean market (15 per cent), Oceania (10 per cent) and the rapidly developing Japanese market (5 per cent).

Internationally, the industry is very competitive in jewellery chain manufacturing, metal stamping and pressing, and costume jewellery. Much of this competitive capability has resulted from the substantial investment in capital and plant equipment made by a number of firms in recent years.

Recent Canadian Marketing Activity

As indicated in Table 23, in the period 1977-1981, Canadian exports of jewellery and silverware to Japan have increased more rapidly than to any other country.

Table 23:

Canadian Jewellery Industry Exports, 1977-1981

($'000)

	1977	1978	1979	1980	1981	Average annual growth rate (%)
U.S.	2.8	5.5	7.0	6.3	9.5	48
Britain	2.5	2.3	4.0	5.5	4.6	17
Australia New Zealand	0.9	1.8	3.4	2.5	3.2	51
Japan	0.2	0.5	0.6	1.1	1.7	150

Source: Statistics Canada

This 750 per cent increase in sales to Japan over five years can be directly attributed to the co-operative efforts of the Federal Government (CTC shows),and the industry in pursuing the Japanese market.

Exports to Japan in 1981 reached $1.7 million which is a 55 per cent increase over 1980. As indicated in Table 24, page 185, although all three subsectors, precious jewellery, costume jewellery, and silverware showed significant increases from 1980, costume jewellery exports rose the most. Canada has an excellent opportunity to further penetrate this market since it has established an excellent reputation for mid-priced, well-finished costume jewellery. It is expected that Canadian costume jewellery manufacturers will show substantial gains in the next two to three years.

Table 24:

Canadian Jewellery Exports to Japan 1978-1981

($'000)

	1978	1979	1980	1981
Precious metal jewellery	147	87	73	114
Costume jewellery	345	487	932	1,535
Silverware and goldware, n.e.s.	8	2	6	10
Gemstones	14	15	10	15
Total Jewellery	514	591	1,112	1,674

Source: Statistics Canada

In the period 1974-1976, private sector contact with Japanese buyers was sporadic and only one company established a continuing relationship. However, in 1975 eight companies were introduced to Japan. This was followed up by a visit of 12 Japanese buyers to Canada in 1976. Although not a major sales success, the information and knowledge gained by the industry was invaluable as a framework for market development in subsequent years. In 1979, 12 jewellery and fur companies inaugurated the Canadian Trade Centre in Tokyo with $150,000 on-site sales. In 1980 and 1981, there were solo jewellery shows held at the CTC which led to on-site sales of $200,000 and $267,000 respectively. The establishment of sustained contact and repeat orders, rather than high on-site sales, have been ITC's objectives. The May 1982, CTC show attracted the largest contingent of Canadian jewellery industry manufacturers ever to exhibit outside Canada. A solid export base is finally being established and there are now five or six Canadian firms doing business in Japan on a continuing basis. As a result, several Canadian firms now regularly visit Japan two or three times each year.

In the precious jewellery area, Canadian manufacturers have had a more difficult time in penetrating the Japanese market, largely because of the quality and craftsmanship image associated with Italian and French products. It is necessary to raise Canada's image as a manufacturer of well-designed, high quality precious jewellery in order to compete with the Italian and French brand names which abound at precious jewellery counters in Japan. Canadian manufacturers must increase Japanese awareness and emphasize their 14 KT and 18 KT capability.

Japanese usage of such items as silverplated wine goblets, candlestick holders, trays and flatware etc. is still far behind western usage and this is not seen as a market with great growth potential.

Canadian Success Stories

The Canadian jewellery industry has penetrated the Japanese market primarily through its costume jewellery manufacturers. D'Orlan Ltd. of Toronto began shipping to Japan in 1975 and made virtually all jewellery sales to Japan for several years.

Keyes Jewellery Mfg. Ltd. and Coro Canada are two other active costume jewellery exporters to Japan. Their success was attributable to the trade promotion efforts of ITC. In 1981 these two companies shipped $800,000 to $1 million worth to Japan.

In precious jewellery, Canada has had sporadic success with several companies; although Treasure Creations Ltd. of Vancouver (gold nugget jewellery) appears to have succeeded in maintaining the continuing interest of the Shibamoto trading house.

It is interesting to note that most of the Canadian companies showing success have a distinctively European name, or include such for a certain part of their product line, i.e. Keyes (Puccini), Coro (Vendôme), National Chain (Chatelaine), and D'Orlan.

Market Considerations

Tariff rates, which will average slightly over 15 per cent in 1982, provide Canada neither with an advantage nor a disadvantage in relation to other developed countries. However, Spain, which is a major chain producer, does receive preferential treatment up to a yearly ceiling set by Japan. Canadian hallmarking is accepted in Japan, and problems arise only when the firms do not follow the meticulous documentation and description requirements of the Japanese import authorities.

The Japanese preoccupation with brand names, especially European, is the major hurdle the Canadian precious jewellery industry must overcome. As the Japanese importer becomes more aware of Canadian capability sales should increase. There are definite signs that progress is being made in this area. The high cost in terms of time and expense creates an impediment for many small companies who have the capability to export their products.

The Competition and Competitor Activity

Principal competition for Canadian goods in both precious and costume jewellery, comes from Italy, France, the U.S., West Germany, Hong Kong and Britain. These competitors have all been entrenched in Japan for some time. Canada has been able to compete successfully in Japan relative to U.S. and Britain's imported jewellery.

The U.S. Government mounted its first specialized jewellery sales mission to Japan in September 1981 with 12 jewellery and gem firms. The loose diamond suppliers found excellent sales opportunities, however, manufacturers of finished jewellery encountered difficulties with the 17 per cent duty rate, styles and Japanese business practices. The U.S. manufacturers generally lack the familiarity of their Canadian counterparts. Sales of finished jewellery were primarily in 18 KT and platinum.

The Action Plan **(For contacts see Appendix II)**

Canada's objectives for the jewellery sub-sector are increased Japanese consumer awareness of Canadian capabilities and an increased Canadian manufacturer willingness to pursue opportunities in Japan. Specifically, the following market development activities[1] are planned for the next two to three year period:

i) Follow-up CTC jewellery shows in Japan and continue promotion of the CTC in Canada in order to attract a stronger line-up of jewellery firms. **(Post/DOJ/TCP)**

ii) Strengthen Canada's fashion image in Japan by the promotion of Canada's jewellery/fashion designers in other markets, such as the U.S. and Europe. In this regard, stronger ties should be encouraged between the jewellery and fashion industry's export efforts, particularly through relevant trade associations. **(Post/TCP)**

iii) Encourage Japanese fashion/jewellery magazine editors to visit the Canadian plants of precious jewellery manufacturers. **(Post/TCP)**

iv) Work closely with DeBeer's Canada/Japan to publicize Canadian diamond award winners and consider integrating a showing by top Canadian designers/award winners either in Japan or Canada. **(Post/TCP)**

v) Increase the focus on Japan for the jewellery industry at the next export seminar conducted by the Textiles and Consumer Products Branch. **(TCP)**

vi) Encourage incoming Japanese missions to the Canadian Jewellery Trade Fair. **(Post/TCP)**

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on jewellery contact the Textiles and Consumer Products Branch, DRIE **(see p. 236)**

Floor Coverings

The Opportunity

The increase in high-rise, multiple unit housing complexes in Japan in recent years, and of Western-style homes, has resulted in a demand for Western-style carpets. The market size is estimated at 120 million square metres, of which imports represent approximately one-sixth.

The Japanese look for special features in imported carpets, those not easily obtained domestically such as special printing and high quality tufting. The greatest potential for Canadian firms is in commercial installations, office buildings, hotels, restaurants and retail stores. There have been many changes in the distribution system due to the growth in demand for carpets, in particular an increase in the number of dealers at the retail level. Both specialized and general trading firms import carpeting, and then primary and secondary wholesalers distribute the product to the retail level of department stores, supermarkets, specialty shops and furniture stores.

The Canadian Industry

The Canadian industry produces bonded and woven carpets and a virtually unlimited range of tufted carpets primarily of synthetic fibres. Twenty-nine companies have production facilities in Canada with annual capacity ranging from less than 1 million to over 10 million square metres. Quebec accounts for 50 per cent of the establishments, 45 per cent of total employment and 54 per cent of total shipments. One establishment is located in Alberta, another in Nova Scotia and the balance are in Ontario. The total value of industry shipments in 1980 was $500 million, representing an output of about 73 million square metres. Exports in that year represented almost 12 per cent of industry shipments, up substantially from the 3 per cent level of 1976-1977.

Export increases have been responsible for almost 50 per cent of the industry's growth in recent years. Domestic market consumption has fallen off considerably as compared with the more than 20 per cent growth rates of the early 1970s. With the slowdown in the residential component of the domestic market, manufacturers invested substantially to enhance their capabilities in serving the commercial side of the market, now estimated to represent 40 per cent of domestic consumption. The major Canadian mills have adopted the latest technology for the basic manufacture of carpet and for dyeing and printing systems which provide coloration and patterns. The ratio of new capital expenditures per employee in the industry has consistently exceeded that of the world's major producer,

the U.S., which manufactures an estimated 50 per cent of total world output. From a technological standpoint, the Canadian industry is as advanced as any of its competitors, that is one reason why it has captured 89 per cent of the domestic market.

Foreign-owned mills in 1976 controlled 64 per cent of industry shipments, but with the closure in 1980 of two foreign-owned mills, this figure is believed to have dropped slightly. Those firms with a high degree of foreign ownership have been the most aggressive in pursuing export markets. Approximately one-half the Canadian industry is engaged in export. A few firms ship over 30 per cent of their production outside of Canada. Australia now represents our major market with 50 per cent of exports, followed by Britain (14 per cent), the U.S. (13 per cent), and the Middle East (6 per cent). Most foreign-controlled mills (e.g. Burlington, in Japan) have successfully negotiated mandates to service selected world markets.

Recent Canadian Marketing Activity/Success Stories

After successful export development ventures in Europe and Australia in the 1975-1978 period, the industry began an investigation of the Japanese market. An initial showing of carpets took place at the Canada Trade Centre in October 1979. Subsequent follow-up CTC shows in Tokyo were expanded to include Osaka in October 1980 and 1981, have resulted in the establishment of a solid base for about five exporters. Sales have increased from $670,000 in 1979 to $1.3 million in 1981.

It has taken about three years to establish the Canadian marketing teams best suited for the products of individual mills. Annual volume sales of established companies can be expected to increase as long as regular contacts are made and service is provided to individual distributors.

Market Considerations

It had been expected that carpet exports to Japan worth $5 million would flow from the introduction and exposure of Canadian carpet manufacturers at CTC shows. The sales have not materialized at that pace because the costs in time and promotion in the Japanese market were greater than the benefits which accrued from the pursuit of other markets. The Japanese market has not fully accepted the wall-to-wall covering concept, preferring instead the use of area rugs.

As carpet sales are linked to the acceptance of western style housing in Japan, there is a need to encourage closer ties in Canada between the Canadian carpet and floor covering exporters and such institutions as the Council of Forest Industries of British Columbia.

Although the Japanese authorities have instituted stringent flammability tests for carpeting and floor coverings, these have not been impediments to Canadian products which have been able to pass the requisite tests.

Competition and Competitor Activity

Canada's main competitors in Japan are the U.S., with 50 per cent of the market, Britain and China who share the remainder. The U.S. competitors and the Japanese mills themselves offer similar products at lower prices than Canadian firms.

The Action Plan **(For contacts see Appendix II)**

Departmental involvement in promotional activity for this subsector in Japan over the past four years has enabled the industry to establish the appropriate market base. It is the intention to encourage the Canadian Carpet Institute (CCI) to continue an annual showing of Canadian carpeting in Japan as a means of servicing distributor accounts and introducing new products to Japanese buyers. In addition, the following market development activities[1] are planned during the next two to three years:

i) The fourth solo show in Osaka in 1982/1983 would be followed on an annual basis by other shows of similar format, for which CCI would be encouraged to provide support. **(DOJ/TCP)**

ii) Encourage links between the housing/interior furnishings manufacturers and carpet makers to share in joint advertising programs (through key Japanese trade journals) to promote Canada's overall consumer goods image. **(Post/TCP/RIB)**

iii) Encourage Japanese importers/distributors to visit Canadian booths at major international floor covering shows. **(Post/TCP)**

[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on floor coverings contact the Textiles and Consumer Products Branch, DRIE (see p. 236)

10b. Industrial Goods

Health Care Products

The Opportunity

The total market for health care products in Japan is huge, with the market for medical equipment, supplies, and

pharmaceuticals estimated at $23 billion. Imports of these products constitute about 25 per cent of the market. In view of Japanese demographic trends, long term demand for health care products is expected to be very high. (Japan will have the highest proportion of aged people in the world by the year 2020.)

The Japanese pharmaceutical market is estimated at over $19 billion, while the medical and dental equipment market is worth about $4 billion. Total national expenditures in Japan, for all types of health care and equipment was estimated to be $40 billion in 1980. Imports accounted for a 24 per cent share of the medical equipment sub-sector and a 30 per cent share of the pharmaceutical sector in the same year. As the Japanese prefer to stress preventive care, the market for pharmaceuticals in Japan is the second largest in the world, as well as the most competitive. Since it is a national policy goal that hospitals and specialized clinics be expanded and upgraded, and since the proportion of people over 65 years of age is expected to double by the year 2010, the growth of the health care products sector is estimated at 10 to 15 per cent per year.

Generally speaking, the Japanese medical devices industry is well-developed, but areas such as cardiac pacemakers remain open to Canadian exporters. In terms of pharmaceuticals, the Japanese industry is of world class with a fully integrated infrastructure. Canadians could only expect to compete in selected areas, on specialty items. Canadian products would be limited to bulk shipments rather than fully finished products, because of the lack of appropriate packaging and labelling facilities in Canada.

The Canadian Industry

The Canadian Health Care Products Industry is composed of two sub-sectors: (i) medical devices and (ii) pharmaceuticals.

Medical Devices

The medical devices industry in Canada is made up of a large number of firms dispersed among a number of manufacturing sectors and the wholesale distribution trade. For many of the large firms, medical devices represent a relatively small part of the firm's total activity. On the other hand, there are also a large number of first generation entrepreneurs who have started business with a single product idea, usually with limited financial resources. Government assistance programs have been beneficial to several Canadian firms.

It is estimated that there are more than 5,000 distinct kinds of medical devices of which only about 1,500 are manufactured in Canada, and when variations in model and design are

considered, the number of individual types of devices is considerably higher. Products range from low technology mass-produced items such as tongue depressors and surgical dressing, to radiation therapy devices, heart pacemakers and computer-assisted diagnostic equipment from capital and technology-intensive companies. As a result, production facilities vary widely from large, modern installations to small, one-of-a-kind custom operations. However, the industry is still in its early development stages and its manufacturing capability is quite fragmented.

The combined value of domestic and export markets for medical devices in 1977 has been estimated at about $860 million. In 1981, the combined value is estimated to be about $1.2 billion. The value of exports of Canadian medical devices in 1980 was approximately $100 million.

In 1977, Canada imported about 75 per cent of domestic needs and exported more than 20 per cent of its production. Relatively few companies have a significant export activity.

It appears that medical device usage in Canada and the United States is more fully developed than in most other countries. The Canadian share of the total world market for medical devices ($25 billion in 1977) is about 3 per cent. Corresponding shares of other major suppliers of medical devices are, U.S. (36 per cent), Japan (12 per cent), West Germany (6 per cent) and France (5 per cent).

The Canadian medical devices industry is in a fledgling state of development and its export potential will match its progressive development.

Pharmaceuticals

About 7 per cent of the Canadian GNP is spent on health care, and about 7 per cent of health care expenditures represent pharmaceuticals. In 1980, this amounted to about $1.3 billion, which represents only about 2 per cent of the total world demand for pharmaceuticals.

The industry is made up of about 120 companies, with about 140 facilities and 16,000 employees. The major concentration of manufacturers is in Ontario and Quebec. The industry is very largely foreign-owned and composed of subsidiaries of multinational corporations, mostly of U.S., British and Swiss origin. The top 20 companies, which share about 65 per cent of the market, are all subsidiaries of foreign corporations. Canadian pharmaceutical manufacturing is limited largely to compounding and packaging of active ingredients into final dosage forms for sale in the domestic market.

The predominantly domestic market orientation of the sector has resulted in relatively low exports. In 1980 only $89 million of pharmaceutical products were exported (7.5 per cent of shipments), while imports amounted to $365 million. The total Canadian market is expected to be in the $1.8 to $2.3 billion range in 1985. In the same period, the world markets are forecast to reach $90 billion a year. About 20 per cent will be produced by North America, including 2.0-2.5 per cent by Canada.

Recent Marketing Activity and Success Stories

Japan is Canada's third largest export market for pharmaceuticals and medical equipment after the U.S. and Western Europe. As Table 25 indicates, Canada's success in its export of health care products to Japan has shown an 8-per cent annual rate of increase since 1979.

Table 25:

Canadian Exports of Health Care Products to Japan, 1979-1981

($000)

	1981*	1980	1979
Biological products - human use	3,504	3,418	1,471
Antibiotics, vitamins, veterinary medicines	170	534	944
Medical and pharmaceutical products	2,092	3,189	2,158
Animal glands and materials (used in medicines)	201	325	126
Sub-total pharmaceutical/medical supplies	5,968	7,466	4,699
Bandages, medical and surgical supplies	2,686	1,468	482
Opthalmic lenses and goods, hearing aids	497	619	870
Medical and related, optical instrument, X-ray equipment	845	1,380	1,979
Sub-total medical equipment	4,028	3,467	3,331
Total	9,996*	10,933	8,030

Legend: * January - November only totals for 1981.

Source: Statistics Canada

In the pharmaceuticals sub-sector there have been some modest exports to Japan. Syntex has built a new plant in Mississauga to manufacture oral contraceptives. This is an example of a multinational bestowing a regional product mandate. It is expected that the surplus capacity of this plant will be exported to Japan. Canada Packers have exported bile salt derivatives and other products such as pepsin, trypsin and heparin.

In the medical devices sub-sector, Harco Electronics has had commercial success with its Periotron (a dental diagnostic instrument). Medtronics of Canada Ltd., an American subsidiary, is supplying 40 per cent of Japan's pacemakers. AECL have recently sold two major nuclear medicine systems.

The Health Care Products Show held at the Canada Trade Centre in November 1981 had an excellent response from the Japanese trade. The general level of satisfaction among the Canadian exhibitors indicated a need for continuing this type of program to develop this sub-sector. Projected sales for 1982, as a result of participation in the CTC/Show were $1.9 million. More company participants are anticipated in 1982 because the range of products was extended to dental equipment and hospital supplies.

Market Considerations

The Japanese Ministry of Health and Welfare (MHW) demands strict adherence to the laws and regulations for approvals of medical equipment and supplies. The most frequent complaint from foreign firms is that procedures for obtaining Japanese Government approval to import such products are usually very time-consuming, complicated and sometimes costly. Foreign manufacturers cannot apply for such approval on their own behalf, but must rely on approved importers in Japan to obtain authority to import their medical equipment and supplies.

It is imperative therefore, that Canadian manufacturers of medical equipment are careful to select qualified sales representatives in Japan. These representatives should not only have good service facilities and a wide sales network with extensive contacts at the hospital and clinic levels, but also some experience in obtaining import authorization from the Japanese Government.

Significant impediments to trade include such non-tariff barriers as regulatory requirements (both clinical and commercial), and the somewhat less formal, but no less stringent, requirements of Japanese business practices, which apply equally to the medical devices and pharmaceuticals sub-sectors. The limited export experience of Canadian firms presents some difficulties because the Japanese prefer to maintain long-term business relationships.

Competition and Competitor Activity

American firms and several European exporters provide the competition in medical devices. They have established a long-standing presence in Japan and distribution through Japanese manufacturers' representative agencies. Siemens, a major European manufacturer, has interests in several Japanese subsidiaries. Similarly, on the pharmaceuticals side, the major multinationals all have a presence through joint ventures, local manufacturing arrangements and co-operative research undertakings.

The Action Plan **(For contacts see Appendix II)**

The Canadian industry must familiarize itself with the realities of the Japanese health care products market. This is important both in terms of industry's expectations of how long it will take to gain entry, the amount and complexity of effort involved, and in terms of their expectations of the potential to be realized. Given the largely domestic orientation of the pharmaceutical sub-sector and the early state of development of the medical devices sub-sector in Canada, only modest export developments should be expected. Promotional efforts will not be intensive, although Japanese distributors and users should be familiarized with the Canadian industry, its companies and its products. Specific market development activities[1] in the next two years will include:

i) On-going programs of missions to Canada and outgoing missions to Japan, and promotional exhibits at the Canada Trade Center are planned as a follow-up to the previous CTC shows. **(DOJ/CHE)**

ii) Other scientific and technology exchange programs and seminars will be initiated. **(CHE/Post)**

For further information on health care products contact the Chemicals Branch, DRIE (see p. 236)

Instrumentation

The Opportunity

Despite the downturn in the Japanese economy, the instrumentation market in Japan has shown a steady growth rate since 1974. The total domestic market (production plus imports less exports) grew by over 50 per cent between 1976 and 1980,

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

reaching 657 billion yen in 1980. In the electrical measuring instrument market, the domestic market has grown 71.2 per cent since 1976.

That growth is an indication of the attempt by the Japanese industries to rationalize production through automation and labour-saving devices, by using electrical and electronic measuring instruments. The market for instrumentation can be divided into two main groups, electrical measuring instruments, and electronic equipment for measuring, checking, analyzing or automatic control. Specifically, the market for the former is made up of seven distinct sectors: indicating meters, electricity meters, test and measuring equipment, process measuring and control instruments, measuring instruments and equipment for environmental protection, radiation instruments, and electrical measuring instruments for medical applications. Products range from miniature-size meters used in stereo equipment to instrumentation devices required by giant steel mills, chemical plants and nuclear power facilities. The electronic instrument group consists of sophisticated instrumentation systems rather than specific measuring devices.

Imports play an important role in this industry sector. Between 15 and 23 per cent of the domestic market is served by imports in such areas as electronic instrumentation for measuring, checking, analyzing or automatic control, process and control equipment, test and measuring equipment and indicating meters.

The Japan Electrical Measuring Instrument Manufacturers Association is concerned that projections contained in the Economic Planning Agency's report on its New Economic and Social Seven-Year Plan for the 1978-1985 period will cause plant and equipment investment to grow at less than the rate experienced during the last half of the 1970s. This will have a direct effect on instrument production, which could be a hardship for imports, especially if the market grows more slowly than originally expected, since the domestic industry would be major competition to increased penetration by imports.

Due to the specialized nature of many products in this market sector, two channels appear to be used most frequently to distribute imported products to consumers. For those products which are highly specialized and appeal to a small market segment, most foreign firms have tended to use small specialized agents to handle their product line. These agents can then devote the necessary time to cultivate their selected customer base. On the other hand, an importer/national distributor appears to be used by those firms whose products have more of a mass appeal with the requirement for a wider distribution system.

The Canadian Industry

The instrumentation and industrial process control systems sector in Canada consists of the following seven sub-sectors: industrial process control, instrumentation and automation equipment and systems; building instrumentation and automation equipment and systems; biomedical and health care instrumentation; electrical, electronic data and logic test and measurement instruments and systems; scientific, analytical and laboratory instrumentation; remote sensing and environmental instrumentation; and geological, geophysical and geotechnical apparatus. Of these sub-sectors, the fields of electronic instrumentation, electrical test and measuring equipment, and process measuring and control instruments hold the most promise for Canadian industry. In Japan, the domestic industry has demonstrated strength in these areas. For a Canadian firm to be successful, it has to manufacture unique and competitive products. Opportunities and activities in the biomedical and health care instrumentation field in Japan are covered in the previous section on health care products.

The reported sales of Canadian instrumentation companies in 1978 totalled $580 million, of which 20 per cent was exported primarily to the United States.

The instrumentation sector is made up of firms of all sizes, production capacities, and technological capabilities. Although 80 per cent of the firms in the sector generate annual sales below $2.5 million, the major share of the Canadian output is produced by the large multinationals. By international standards, even the key companies in this sector are relatively small.

Most companies (55 per cent) are located in Ontario. However, Quebec, Alberta and British Columbia each comprise approximately 13 per cent of the industry. The remaining 6 per cent is split between Manitoba, Saskatchewan, Prince Edward Island and Nova Scotia.

This industry sector undertakes considerably more research and development activity than does the secondary manufacturing sector as a whole. Since entry into a number of the sub-sector markets is relatively easy with limited capital investment, firms must be prepared to undertake continuous research and development into new products to maintain a competitive edge in the marketplace.

Canadian Market Development/Success Stories

As Table 26 indicates, Canada captured between 1.0 and 2.0 per cent of Japan's total instrumentation imports over the past five years. In some areas, such as electronic apparatus for

measuring, checking, analyzing and automatic controlling, our success has been greater than in others.

Table 26:
Japanese Electric/Electronics Instrumentation Imports, 1981

	Units	Cdn. Value ($000)	Percentage total market
Electronic circuit tester	4	0.5	x
Spectrum analyzers	1	15	0.1
Instruments for measuring electrical quantities	1,532	216	0.3
Electronic analyzing apparatus	5	61	x
Electronic automatic controlling apparatus	35	162	0.9
Electronic apparatus for measuring, checking, analyzing, automatic controlling, n.e.s.	889	4,906	2.1
Electrical apparatus for measuring, checking, analyzing, automatic controlling	51	1	x
Radiation, ionizing apparatus	3	6	0.1
Electronic automatic regulators and apparatus	3	97	0.9
Total	2,523	5,464	1.0

Legend: x Less than 0.05%
Source: Japanese Import Statistics

Two trade shows for this sector were held at the Canada Trade Centre in May 1979 (Electronics Show) and in June 1980 (Instrumentation Show). Each of these shows gave the participating Canadian firms an opportunity to consolidate their relationships with their respective agents/distributors, and also to contact potential customers.

Numerous small independent Canadian firms with a unique product or series of products have successfully penetrated the Japanese instrumentation market. Some notable examples are: Aptec (co-axial spectrometer), Ferranti Packard (electronic displays), Fluidynamics (fluorometer photo counting system), Guildline (AC/DC standard voltmeter and calibrator), Leak X (pipeline leak detection equipment), Milltronics (process control equipment), Photochemical Research Associates (photochemical measuring instruments), and Scintrix (geophysical survey equipment).

Market Considerations

Tariffs are not a serious impediment to imports, they range from 5.6 to 7.3 per cent with the majority of instrumentation equipment entering Japan at the rate of either 5.6 per cent or 5.7 per cent. The GATT negotiations reduced several tariff rates. In particular, the tariff for electronic apparatus and for measuring instruments will eventually eliminated.

As noted in the section on health care products, government regulations however, do arise with regard to instrumentation for medical applications and instruments using radioactive substances. The procedures for obtaining Japanese Government approval for instrumentation connected with medical applications are therefore time-consuming, complicated and costly, and act as an impediment to imports.

The various sub-sectors of the instrumentation industry in Canada are relatively small and diverse. As such, the instrumentation sub-sectors have more in common with other functional areas than with each other. It makes sense to tie-in the promotion of a specific instrumentation sub-sector with related sectors. For example, the biomedical and health care instrumentation sub-sector has a great deal in common with the health care products sector. Similarly, remote sensing and environmental instrumentation has more affinity with the ocean industries sector, than it does with the industrial process control sub-sector.

Competition and Competitor Activity

In Japan, the major import source for instrumentation is the U.S. and the EEC. Specifically, the U.S. captured 77.4 per cent of electrical measuring instrument imports in 1979, followed by F.R.G. (5.4 per cent), Britain (5.4 per cent), Belgium (2.3 per cent), Sweden (1.4 per cent) and France (1.4 per cent).

According to Japan's Electrical Measuring Instrument Manufacturers Association (JEMIMA), Japan's electrical measuring instruments industry has undergone noticeable growth since the 1950s with the help of imported technology. However, despite their wide use, the number of instruments produced of a particular type is not that large, in contrast with mass-produced industrial products. This has tended to build up a domestic industry made up of small and medium-sized manufacturers. Notably 218 of the 238 firms in the industry employ fewer than 300 employees. Over 65 per cent of all shipments by the industry are handled by the 20 largest firms, with the seven largest firms shipping 45.6 per cent of the total output.

The majority of electronic instrumentation equipment however is manufactured by most of the 420 members of the Electronic Industries Association of Japan, an association in which 50 of its members have over 300 employees and produce over 60 per cent of the total output. Hence, the electrical measuring instruments industry is dominated by small firms while the electronic instrumentation industry is dominated by the giants of the industry, such as NEC, Toshiba, and Hitachi.

Foreign competitors have well established contacts in Japan and in most cases have aligned themselves with the leading agent/distribution houses, and this could be an obstacle for Canadian firms interested in tying up with the right local representative.

The Action Plan **(For contacts see Appendix II)**

The increases in Canadian exports to Japan are directly related to the promotional efforts which have been undertaken by the industry and government. It is now important to expand government's efforts[1] over the next two to three years in the following areas:

i) Assist individual firms with good market potential to find appropriate agents or distributors. **(Post/ELE)**

ii) Encourage companies to use Embassy facilities, or other suitable sites, for specialized one-company seminars. **(Post/ELE)**

iii) Encourage the participation of instrumentation companies in horizontal, or other functional type missions, rather than in instrumentation missions as such. **(Post/DOJ/ELE)**

For further information on Instrumentation, contact the Electrical and Electronics Branch, DRIE (see p. 236)

Aerospace

The Opportunity

The Japanese domestic aircraft industry has relatively few firms, all highly dependent on the domestic (primarily military) market. Their manufacturing processes are largely derived from licensed production agreements with major U.S. aircraft companies. Overseas industrial co-operation agreements, however, (joint development, transfers of technology) have recently become more evident with the active encouragement of both government and industry. The research and

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[1]Unless otherwise indicated, the activity/event is considered to be ongoing.

development capability of the Japanese aircraft industry therefore currently exceeds its production base.

According to the Society of Japanese Aerospace Companies (SJAC), the total output from aircraft and related production in 1980 amounted to $1,278 million (up 6.9 per cent from 1979) and total repairs amounted to $299 million (up 3.9 per cent from the previous year). Adding these two figures, the aircraft-related output in 1980 was $1,578 million (up 6.3 per cent from the previous year). Of this total output, the Japanese Defence Agency (JDA) absorbed the usual largest share of 77.6 per cent (compared with 81.9 per cent in the previous year) or $1,224 million; the U.S. military demand in Japan was 0.8 per cent ($11.9 million), the domestic market was 9.2 per cent ($145.7 million) and 12.4 per cent or $196 million worth was exported.

In 1981, the domestic aircraft industry built a total of 132 aircraft of which 106 were fixed-wing planes and 26 were helicopters. Engine production on the other hand, was 99 units which included 35 turbo-jet engines, 9 turbo-prop engines and 33 turbo-shaft engines.

Due largely to space constraints at airports, the general aviation market in Japan is not significant. The Mitsubishi Diamond Business Aircraft (Pratt and Whitney Canada is the engine supplier) is being assembled in the U.S., not in Japan.

There are three major aircraft companies in Japan: Mitsubishi (MHI), Kawasaki (KHI) and Fuji Heavy Industries (FHI). A fourth company, Shin Meiwa, is specializing in seaplanes, but its limited size and its lack of innovative technology constrain its growth. While MHI does have some capability in engine technology, the most important engine company is Ishikawajima-Harima Heavy Industries (IHI). There are perhaps 30-50 other companies which act as sub-contractors. Most avionics (black boxes) are imported or manufactured under licensing agreements. The Japanese also have an active and substantial space industry (launch vehicles and satellites) which specializes in remote sensing and image processing.

Industrial co-operation programs, while increasing in scope and number, face two limitations from the Canadian perspective, the small size of the domestic general aviation market and a Japanese prohibition on the export of military products. The U.S. (Boeing) has been the major partner with Japan in the development of a domestic capability in large aircraft (YX-767, 757 and the future YXX (150 passenger) programs. The United Kingdom has also actively promoted industrial co-operation programs with Japan. The most notable success is the ongoing RJ 500 engine program between Rolls Royce and Japan. With the recent addition of Pratt and Whitney (United Technologies) to this consortium, the prospect of this engine being selected for the YXX program has been

enhanced. It is, of course, not clear whether the YXX program will proceed, although the Japanese Government has budgeted $74.4 million in FY 1982/1983.

Prospects for the sale of Canadian aerospace products, while limited, do exist. De Havilland Canada Ltd. has sold seven Twin Otters to date and has some chance of selling Dash 7's to a commuter airline. Canadair may be able to achieve a breakthrough sale for the Challenger aircraft. CAE has sold an A300 aircraft simulator and may have some longer term possibilities for other aircraft simulators such as those for the Boeing 767 or 757. Other Canadian avionics suppliers like Leigh Instruments, CMC, Garrett Manufacturing Company, and Litton have sold in Japan but have often had to license production. More sales of this type could occur.

Another opportunity might arise for the supply of subcomponents, if the Japanese speed up delivery schedules for the P3C and F15 programs respectively, and if the 767/757/YXX Programs are successfully launched. This might also happen if the Japanese proceed with the MTX (Advanced Trainer Program) and/or one of several other science and technology-sponsored aerospace programs like the 40 passenger STOL aircraft. The major Japanese companies are optimistic about the future of their industry, have invested heavily in new plant and equipment and are fully tooled up for these programs. The increases in Japanese productive capacity are designed to meet scheduled production demands for the foregoing programs. Consequently, should an emergency requirement advance the delivery schedules, additional production requirements could be open to overseas suppliers, including Canada.

As noted earlier, the major market for aerospace products in Japan is military. This has important implications for Canadian suppliers. In one sense it creates an automatic market for Canadian products should these products be used in U.S.-designed equipment introduced by the Japan Self Defence Forces (JSDF). Hence, the Japanese built P3C includes the Leigh Instruments Crash Position Indicator, the Canadian Marconi Doppler System and the CAE Mad Compensator System. As JSDF policy is to license production where possible so as to build Japan's self-reliance in defence production, there is a clear constraint on Canadian sales. With a limited market (defence products exports are prohibited), this policy drastically increases costs; indeed, the JSDF openly acknowledges that it pays a 170 per cent premium to source domestically.

The Canadian Industry

The Canadian Aerospace manufacturing industry has specialized capabilities for the design, research and development, production and in-plant repair and overhaul of aircraft, aero-

engines, aircraft and engine subassemblies and components, space related equipment and air and ground-based avionics systems and components. Most manufacturing efforts are directed towards export markets offsetting the Canadian carriers' and/or operators' need for imported products. An accompanying tertiary component provides a variety of diverse and specialized services normally, but not exclusively, in support of imported aircraft (large jets, helicopters and general aviation aircraft).

In total there are over 100 aerospace manufacturers in Canada of which 90 per cent are located in Ontario and Quebec. In 1981, approximately 43,000 were employed in this sector which had annual sales in excess of $2 billion. The companies comprising the Canadian aerospace industry can be classified in terms of their capabilities into three groups: the first group consists of companies capable of designing and manufacturing complete aircraft or aero-engines; the second group is made up of companies capable of manufacturing aircraft components, space and aero-engine subsystems; while the third group consists of companies manufacturing parts. Generally, first group companies have more than 1,000 employees, second group companies between 100 and 1,000, and third group companies under 100. Two of the first group companies, de Havilland and Canadair, are government-owned, and Pratt and Whitney is a 97 per cent owned subsidiary of United Technologies. The majority of second-group companies are subsidiaries of U.S. parents, while almost all third group companies are Canadian owned.

The location of tertiary group companies follows that of the airline routes and population areas, and in total they number close to 1,000. Most are small and offer localized services to Canadian general aviation aircraft. However, there are several Repair and Overhaul operations which are quite large, notably Innotech, Field Aviation, Northwest Industries (subsidiary of CAE), Standard Aero, Patlon Aircraft and Hawker Siddeley Canada Limited (Orenda Division).

Market Development Activity

As Table 27 indicates, Canadian aerospace products have made small inroads in the Japanese market in recent years, and Canada has secured a trade surplus in aerospace products with Japan. Since Canada is a major supplier to the U.S. aircraft industry, many suppliers are qualified by the U.S. original aircraft manufacturers (i.e. Boeing, Lockheed, McDonnell Douglas), as such many Canadian products are produced in Japan under licensing arrangements. For example, Doppler Radar (Canadian Marconi), Mad Compensator (CAE), Crash Position Indicator (Leigh Instruments), INS (Litton Industries), and

Environmental Temperature Control units (Garrett Manufacturing) are produced in Japan for Japan's P3C and F-15 Programs, all with approximately 50 per cent Canadian content.

At the November 1980 High Technology Show for Aerospace and Defence Products at the CTC, the SJAC provided its assistance to the show and could similarily be expected to support the November 1982 show. Currently in Japan, the Ministry of Transport has under consideration the purchase of three Challenger aircraft for the Maritime Safety Agency for search and rescue surveillance, and as executive aircraft. The Transport Ministry is also interested in Canadian earth station technology.

Table 27:

Aerospace Product Sales to Japan, 1980-1981

	1980		1981*	
	Unit	($000)	Unit	($000)
Turbo-jet engine for aircraft	9	1,797	0	
Turbo-prop engine for aircraft	0		1	143
Engine for aircraft, n.e.s. (**)	4	1,328	8	1,715
Aircraft engine parts	2	3,768		1,549
Radar for aircraft	31	182	41	474
Radio for aircraft	1	80	12	31
DF for aircraft	3	5	2	11.5
Radio nav. Aid for aircraft		80	4	94
Parts of aircraft or gliders n.e.s.		408		220
Parachutes and parts, accessories thereof		4		0.6
Capstans, winches and windlasses of oil hydraulic type		2,340		88
Total		9,992		4,331.5

Legend: * January - November 1981 figures.
** During 1980-1981 Pratt and Whitney sold 450 JT-150 engines valued at $90 million to Mitsubishi for the Diamond 1 aircraft. Nine were delivered to Japan and the remainder were sent to the U.S. where the plane was being assembled.

Source: Japanese Import Statistics

Market Considerations

The Japanese Government practices a so-called administrative control policy over the Japanese aircraft industry thereby ensuring that the production of aircraft for the Self-defence Forces and for national programs is shared among the major aircraft manufacturers. In order to increase their activities above this given level, manufacturers must develop aircraft intended primarily for the export market and mostly at their

own expense. Consequently, most aircraft produced in Japan are for the JSDF (i.e. military market) either under licensing arrangements with U.S. manufacturers or are domestically designed and manufactured.

It should be noted that the Japanese Government is prepared to pay increased costs (30 to 50 per cent) associated with producing aircraft under license to ensure workload and technical skills are maintained domestically. By the same token, many of the domestically developed military aircraft are non-competitive in international markets because costs appear to be double those of competitive plans.

The Japanese Government has restrictions on the export of weapon systems which make it impossible for the Japanese aircraft industry to export aircraft that have been designed for a military role. The industry has not been successful in developing commercial applications for such planes.

There are no trade barriers in the aerospace sector. The Japanese recognize the high level of technology available in the Canadian aerospace industry, and the excellent research and development being undertaken in Canada. The SJAC has welcomed the assistance from the Canadian aerospace industry in the development of an industry comparable in size and competence to that of Canada.

The Action Plan **(For contacts see Appendix II)**

As an outflow of a Ministerial mission to Japan in March 1982, the following activities[1] will be pursued by the Federal Government and the private sector:

i) Identify and explore opportunities for future co-operation and collaboration between the Canadian Air Industries Association (AIAC) and the Aerospace Association of Japan (SJAC). **(AMB/Post)**

ii) Organize participation in a second Aerospace/High Technology Show at the CTC, and participate in the 1983 Japan Air Show to promote exports of Canadian aerospace products. **(DOJ/Post/AMB)**

1Unless otherwise indicated, the activity/event is considered to be ongoing.

For further information on aerospace contact the Aerospace and Marine Branch, DRIE, or the Office of Trade Development Defence Programs, DEA (See p. 236).

TABLES

LIST OF TABLES

Note: All dollar values are in Canadian funds unless otherwise specified.

Table 1: Japan's Gross National Product and Expenditures, 1970-1980

(billion yen, current prices)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Consumers' Expenditure	38,272	43,160	49,813	60,229	72,837	84,568	95,149	105,789	115,910	127,319	138,046
Government Current Expenditure	5,455	6,421	7,537	9,336	12,240	14,890	16,417	18,243	19,752	21,519	23,509
Gross Fixed Asset Formation	26,043	27,637	31,524	40,938	46,695	48,017	51,877	56,177	62,384	70,126	74,869
Change In Stocks	2,573	1,215	1,299	1,885	3,396	494	1,073	1,211	1,037	2,095	1,565
NATIONAL EXPENDITURE	72,343	78,433	90,173	112,388	135,168	147,969	164,516	181,420	199,083	221,059	237,989
Exports of Goods and Services	8,273	9,895	10,377	12,133	19,447	20,254	23,839	25,561	24,105	27,904	35,707
Less: Imports of Goods and Services	7,488	7,806	8,237	12,081	20,693	20,349	22,660	22,613	20,480	29,627	37,934
GROSS NATIONAL PRODUCT AT MARKET PRICES	73,128	80,552	92,313	112,441	133,922	147,874	165,695	184,368	202,708	219,336	235,762

(billion yen, 1975 prices)

Consumers' Expenditure	64,530	68,319	74,830	81,820	81,254	84,546	87,383	90,693	94,968	100,858	102,132
Government Current Expenditure	11,418	12,031	12,661	13,290	13,751	14,680	15,283	15,878	16,680	17,352	17,723
Gross Fixed Asset Formation	40,831	42,568	46,994	53,435	48,574	48,040	49,462	51,857	56,748	60,479	60,516
Residential Construction	8,068	8,451	10,035	11,661	10,183	10,439	11,356	11,549	12,309	12,188	11,082
Non-Residential Construction	23,017	22,523	23,236	26,946	25,580	24,180	24,340	24,943	26,597	29,920	31,849
Government	9,747	11,595	13,723	14,827	12,811	13,421	13,767	15,366	17,842	18,372	17,584
Change In Stocks	3,745	1,782	1,849	2,449	3,528	494	1,051	1,153	966	2,043	1,507
NATIONAL EXPENDITURE	120,524	124,700	136,334	150,994	147,107	147,760	153,179	159,581	169,362	180,732	181,878
Exports of Goods and Services	11,887	13,912	14,797	16,024	19,590	20,311	23,872	26,596	26,650	28,398	33,871
Less: Imports of Goods and Services	14,820	15,508	16,983	21,040	22,530	20,417	21,549	22,427	23,878	27,390	26,310
GROSS NATIONAL PRODUCT AT MARKET PRICES	117,591	123,104	134,147	145,977	144,167	147,655	155,502	163,752	172,133	181,741	189,439

Source: OECD Economic Survey: Japan, July 1981.

Table 2: Annual Per Cent Change in Labour Productivity* and Unit Labour Costs, 1975-1980

	Japan	United States	F.R.G.	France	Italy	Britain	Canada
Labour productivity (output per manhour)	7.3	1.4	3.9	4.7	5.8	0.2	2.7
Unit labour costs	1.1	7.0	3.5	8.9	12.8	15.4	7.9

Legend: * In manufacturing
Source: OECD Economic Survey: Japan, June 1981

Table 3: Employment Trends

(per cent change, annual rates)

	1980		1973[1]	1980					
	Million Persons	Percentage Share in Total Employment	1960	1973	1976	1977	1978	1979	1980
Total Employment	55.36	100.0	1.2	0.7	0.9	1.3	1.2	1.3	1.0
By Sector:									
Primary Sector	5.77	10.4	-5.5	-2.8	-2.7	-1.4	-0.2	-3.2	-5.9
Secondary Sector	19.26	34.8	3.4	0.0	0.8	0.2	0.2	1.1	2.4
Manufacturing	13.67	24.7	3.2	-0.8	-0.1	-0.4	-1.0	0.5	2.6
Construction	5.48	9.9	5.3	2.3	2.7	1.4	4.2	3.1	2.2
Tertiary Sector	30.20	54.6	3.0	2.1	2.0	2.7	2.3	2.5	1.5
Wholesale and Retail Trade	12.48	22.5	--	2.1	2.1	3.6	1.4	1.5	1.6
Services	10.01	18.1	3.1	2.8	2.5	3.1	4.4	3.9	2.1

Legend: [1] excluding Okinawa.

Source: OECD Economic Survey: Japan, July 1981.

Table 4: Japan's Gross Domestic Product by Industry Sector of Origin

(billion yen, current prices)

	1973		1974		1975		1976		1977		1978		1979	
	Yen	%	Yen	%	Yen	%	Yen	%	Yen	%	Yen	%	Yen	%
Primary Sector	6,374	6.2	7,073	5.8	7,635	5.7	8,190	5.4	8,586	5.2	8,606	4.7	9,179	4.7
- Agriculture, Forestry and Fishing	5,768	5.6	6,381	5.2	7,025	5.2	7,518	5.0	7,812	4.7	7,669	4.2	8,123	4.1
- Mining and Quarrying	606	0.6	692	0.6	610	0.5	672	0.4	774	0.5	937	0.5	1,056	0.5
Secondary Sector	42,776	41.7	49,406	40.5	50,931	37.8	58,005	38.2	62,598	37.6	69,843	38.3	75,381	38.3
- Manufacturing	34,008	33.2	38,762	31.8	38,168	28.3	44,552	29.4	48,614	29.2	53,735	29.4	57,530	29.3
- Construction	8,768	8.6	10,644	8.7	12,763	9.5	13,453	8.9	13,984	8.4	16,108	8.8	17,851	9.1
Tertiary Sector	53,375	52.1	65,553	53.7	76,186	56.5	85,481	56.4	95,288	57.2	104,135	57.0	112,097	57.0
- Electricity, Gas and Water	1,247	1.2	1,447	1.2	2,227	1.7	2,658	1.8	3,200	1.9	3,543	1.9	3,308	1.7
- Wholesale and Retail Trade	15,032	14.7	19,137	15.7	20,620	15.3	22,875	15.1	24,168	14.5	25,253	13.8	26,343	13.4
- Banking, Insurance and Real Estate	13,071	12.7	14,992	12.3	16,574	12.3	18,415	12.1	20,850	12.5	23,507	12.9	25,656	13.0
- Government Services	7,548	7.4	10,058	8.2	12,461	9.2	13,787	9.1	15,266	9.2	16,476	9.0	17,708	9.0
- Other Services	16,477	16.1	19,919	16.3	24,304	18.0	27,746	18.3	31,804	19.1	35,356	19.4	39,082	19.9
Total	102,525	100.0	122,031	100.0	134,752	100.0	151,677	100.0	166,472	100.0	182,595	100.0	196,657	100.0

Source: OECD Economic Survey: Japan, July 1981

Table 5: Japan's Exports By Commodity, 1976-1980

(U.S. $ million)

	1976	1977	1978	1979	1980
Foodstuffs	886	869	1,046	1,206	1,588
Textiles	4,216	4,699	4,870	4,908	6,295
- Synthetic fabrics	1,531	1,583	1,764	1,935	2,254
- Clothes	415	462	485	350	499
Chemicals	4,746	4,299	5,102	6,100	6,766
- Chemical fertilizers	180	230	282	328	376
Non-metallic mineral products	921	1,145	1,378	1,547	1,862
Metal and metal products	13,169	14,084	16,041	18,378	21,318
- Iron and steel	10,484	10,518	11,854	14,113	15,454
Machinery and Equipment	39,626	49,744	62,510	63,182	81,481
- Vessels	7,048	8,128	7,172	3,868	4,681
- Electric power machinery	625	922	1,323	1,243	1,503
- Motor vehicles	8,902	11,551	15,530	17,021	23,273
- Office machines	1,011	1,130	1,654	1,830	2,279
- T.V. receivers	1,374	1,328	1,318	1,282	1,660
- Tape recorders	901	1,097	1,661	2,102	3,305
- Radio receivers	2,096	2,434	2,635	2,497	3,008
- Scientific medical optical equipment	1,856	2,548	3,448	3,860	4,526
Other	4,658	5,651	6,593	7,707	10,493
Total Exports	67,225	80,494	97,543	103,031	129,807

Source: Ministry of International Trade and Industry: Monthly Trade Review (April 1981).

Table 6: Japan's Imports By Commodity, 1976-1980

(U.S. $ million)

	1976	1977	1978	1979	1980
Foodstuffs	9,375	10,105	11,402	14,415	14,666
- Wheat	1,051	739	827	1,090	1,229
Textile Materials	1,795	2,002	2,102	2,448	2,393
- Raw cotton	926	1,152	1,068	1,263	1,359
Metal and Ores and Scrap	4,578	4,776	4,836	6,850	8,429
- Iron ore	2,331	2,554	2,453	2,999	3,448
- Non-derrous metal ore	1,913	1,914	1,754	2,879	3,730
Raw Materials n.e.c.	6,810	7,562	8,440	12,896	12,937
- Wood	3,531	3,802	4,135	7,353	6,908
Mineral Fuels	28,287	31,148	31,336	45,286	69,991
- Petroleum, crude and partly refined	21,184	23,572	23,432	33,470	52,762
Chemicals	2,661	3,003	3,763	5,178	6,202
Machinery and Equipment	4,608	4,890	6,499	8,342	9,843
- Office machines	500	603	597	783	1,032
- Aircraft	237	200	395	742	991
Other	6,681	7,318	10,960	15,254	16,064
Total Imports	64,798	70,808	79,343	110,672	140,527

Source: Ministry of International Trade and Industry: Monthly Trade Review (April 1981).

Table 7: Japanese Exports and Imports by Selected Country and Region, 1977-1980

(U.S. $ million)

	1977		1978		1979		1980	
	Exports (fob)	Imports c.i.f	Exports (fob)	Imports c.i.f.	Exports (fob)	Imports c.i.f.	Exports (fob)	Imports c.i.f.
Country								
United States	19,716	12,396	24,914	14,790	26,402	20,430	31,367	24,407
Saudi Arabia	2,342	8,505	3,254	8,459	3,828	12,133	4,855	19,538
Indonesia	1,797	4,996	2,094	5,246	2,123	8,793	3,457	13,167
Australia	2,329	5,287	2,692	5,300	2,606	6,207	3,388	6,981
United Arab Emirates	845	2,748	1,015	2,621	1,045	3,633	1,355	8,190
China	1,938	1,546	3,048	2,030	3,698	2,954	5,078	4,323
South Korea	4,079	2,113	6,003	2,591	6,246	3,359	5,368	2,996
F.R.G.	2,781	1,496	3,654	1,997	4,266	2,584	5,756	2,500
Taiwan	2,552	1,288	3,584	1,750	4,366	2,475	5,145	2,293
Canada	1,707	2,880	1,871	3,190	1,738	4,104	2,436	4,724
Region								
North America	21,423	15,276	26,785	17,980	28,140	24,534	33,803	29,131
Southeast Asia	17,125	15,076	23,101	17,293	26,128	26,194	30,909	31,751
Middle East	8,883	20,504	10,745	20,777	10,734	29,377	14,358	44,500
European Economic Community	8,735	4,194	11,104	6,072	12,685	7,580	16,650	7,842

Source: Ministry of International Trade and Industry (MITI): Monthly Trade Review/April 1981.

Table 8: Canada-Japan Trade, 1971-1981

($ billion)

Year	Imports	Exports	Total Two-Way	% Change
1971	0.8	0.8	1.6	-
1972	1.1	0.9	2.0	25.0
1973	1.0	1.8	2.8	40.0
1974	1.4	2.2	3.6	28.6
1975	1.2	2.1	3.3	-8.3
1976	1.5	2.4	3.9	18.2
1977	1.8	2.5	4.3	10.3
1978	2.3	3.1	5.4	25.6
1979	2.2	4.1	6.3	16.7
1980	2.8	4.4	7.2	14.3
1981	4.0	4.5	8.5	18.1

Table 9: Major Canadian Exports to Japan, 1979-1981

($'000)

	1979	1980	1981
Coal	569,893	588,989	680,758
Lumber	468,018	501,355	367,223
Wood pulp	342,615	457,934	388,454
Copper	364,308	354,679	304,004
Rapeseed oil	369,044	317,940	389,355
Wheat	287,784	303,110	368,416
Aluminum pigs, ingots Shot slabs etc.	110,685	240,643	208,920
Pork (fresh or frozen)	114,010	114,989	156,263
Molybdenum in ores conc. and Scrap	NIL	113,468	60,247
Roe (salmon, herring and other fish)	181,564	110,142	172,168
Barley	104,678	97,397	191,577
Iron ore concentrated	72,682	81,154	82,235
Lead (ores and concentrates)	59,730	68,605	25,005
Gold (ores and concentrates)	37,007	65,673	44,453
Silver (ores and concentrates)	NIL	63,479	67,556
Potash	46,503	61,817	61,570
Propane (liquified)	40,458	50,101	61,106
Logs	37,376	44,143	35,992
Pulpwood chips	17,381	43,326	43,477
Flaxseed	31,814	35,504	37,773
Zinc	64,027	34,161	51,702
Alcohols and derivatives	NIL	28,526	80,570
Chemicals elements NES	16,398	26,244	7,985
Alfalfa (dehy)	23,590	23,883	20,998
Hydrocarbons and derivatives	NIL	22,114	13,587
Salmon	26,791	21,451	40,247
Card punch sort tab computers and parts	NIL	19,307	18,989
Squid and shellfish NES	19,009	18,690	4,140
Tallow	18,288	18,481	18,401
Liner board	10,727	16,860	18,414
Wrap paper	10,119	15,768	6,408
Ferro-silicon	NIL	15,697	18,595
Metal bearing (ores and concentrates)	NIL	11,247	6,521
Pelleted screenings (animal feed)	NIL	10,777	13,310
Beef, frozen, boneless	NIL	10,642	12,662
Ham (not cured or cooked)	20,403	9,999	22,595
Sub-total	3,500,590	4,018,294	4,101,691
Others	606,589	352,179	383,683
Total	4,107,173	4,370,473	4,485,375

Source: Statistics Canada

Table 10: Major Canadian Imports From Japan, 1979-1981

($'000)

	1979	1980	1981
Cars, new	231,512	589,253	991,882
Photographic goods	115,436	164,339	80,389
Electric generating equipment	36,720	136,670	36,521
Motor vehicles, others	131,364	136,338	217,602
Televisions, radios, phonographs	102,864	127,209	202,586
Telecommunications and related equipment	122,160	117,865	12,741
Tires and tubes	67,985	73,272	73,288
Plate, sheet and strip steel	73,411	69,950	98,206
Organic chemicals	22,297	57,626	122
Pipes and tubes, iron and steel	92,801	57,508	74,769
Photocopy and similar machines and parts	NIL	53,769	200
Motor vehicles parts, except engines	37,314	41,472	88,585
Station wagons, new	17,411	38,087	54,853
Office machines and equipment	77,566	35,651	350
Watches, clocks, jewellery, silverware	30,360	34,889	55,522
Kitchen utensils, cutlery and tableware	21,587	33,915	40,800
Fish and marine animals	26,077	27,076	24,544
Bicycle and parts	18,946	26,734	26,668
Bars and rods, steel	26,491	25,325	29,997
Basic hardware, nails, fasteners, etc.	11,951	21,258	21,748
Excavator-type, crane, shovel, power	NIL	21,200	16,214
Unexposed photofilm and plates	29,781	21,057	26,673
Microwave ovens	12,173	17,892	40,363
Track-laying tractors and used tractors	19,408	17,351	16,333
Electronic computers and parts	NIL	17,230	24,610
Oranges, mandarins, tangerines, fresh	12,352	13,808	13,780
Polyester broad woven fabrics	NIL	13,606	34,106
Lathes, metal-working, automatic	NIL	11,246	9,650
Broad woven fabrics, mixed fibres	23,651	2,498	38
Broad woven fabrics, man-made	32,564	2,227	2,602
Well-casing, new	NIL	62,480	68,293
Sub-total	1,415,252	2,172,163	2,384,050
Others	750,167	619,997	1,655,016
Total	2,165,419	2,792,160	4,039,067

Source: Statistics Canada

Table 11: Functional Classification of Canadian Exports to Japan, 1980-1981

($ million)

FOB Canadian Port

	Manufactured Products			Processed Products			Materials			Total		
	1980	1981	% Change	1980	1981	% Change	1980	1981	% Change	1980	1981	% Change
Agricultural Products	9.6	15.5	61.3	267.3	342.9	28.3	781.8	1,028.6	31.6	1,058.7	1,387.1	31.0
Fish Products	1.2	2.0	68.4	48.5	89.8	85.0	60.5	80.6	33.3	110.1	172.3	56.5
Forest Products	48.9	48.2	-1.5	962.4	755.6	-21.5	92.7	81.4	-12.2	1,104.1	885.2	-19.8
Metals/Energy/Chemicals	1.2	1.6	28.2	404.6	450.0	12.0	1,533.1	1,445.6	-5.7	1,957.4	1,897.2	-3.1
Full Manufactured/ End Products	108.4	113.9	5.1							108.4	113.9	5.1
Unclassifiable Exports										30.1	29.6	-1.6
Total	169.4	181.2	7.0	1,682.8	1,638.3	-7.6	2,488.1	2,636.2	6.0	-	-	-
% of Total Exports	3.9	4.0		39.0	36.5		57.6	58.8		0.7	0.7	
Grand Total										4,370.5	4,485.4	2.6

Note: % Change = 1981-1980

Source: Statistics Canada

Totals may not add due to rounding.

Table 12: Japanese Imports and Canada's Market Share, 1979-1980

(U.S. $ millions)

	1979		1980 WORLD		CANADA			
	World	Canada	Value	Growth Rate Over 1979	Value	% Market Share	% Growth Rate	Principal Suppliers
Total Imports	110,672	4,105	140,528	27.0%	4,724	3.4	15.0	U.S. Saudi Arabia, Indonesia
Foodstuffs	14,415	943	14,666	1.7	832	5.7	-11.7	U.S., Australia, Canada
Meat	1,712	146	1,523	-11.0	136	8.9	-6.6	Australia, U.S., Canada
Fish	3,957	73	3,026	-23.5	77	3.0	6.2	Korea, U.S., Taiwan
Wheat	1,090	274	1,229	12.8	323	33.2	17.9	U.S., Canada, Australia
Raw Materials	22,196	1,997	23,750		2,365	9.9	18.4	U.S., Australia, Canada
Metallic ores	6,850	739	8,430	23.1	812	9.6	9.9	Australia, U.S., Philippines
Hides	587	10	386	-34.2	7	1.6	-32.1	U.S., Australia, New Zealand
Rapeseed		333			313	99.9	-5.9	Canada, U.S., Australia
Wood	7,353	462			615	8.9	33.1	U.S., Indonesia, Sabah
Pulp	734	327	1,079	47.0	462	42.8	41.0	Canada, U.S., Brazil
Mineral Fuels	45,286	680	69,991	54.6	744	1.1	9.4	S. Arabia, Indonesia, U. Arab E.
Coal	3,549	613	4,458	25.6	673	15.1	9.9	Australia, U.S., Canada
Manufactured Goods	28,775	485	32,110	11.6	782	2.4	61.2	U.S., F.R.G., Korea
Chemical Products	5,178	113	6,202	19.8	194	3.1	72.1	U.S., F.R.G., France
Machinery and equipment	8,343	48	9,843	18.0	132	1.3	176.8	U.S., F.R.G., Britain
Aircraft engines					5.3	2.0	36.0	U.S., Britain, Canada
Agricultural machinery					2.7	2.7	162.0	U.S., Britain, F.R.G.
Office machines					24.6	2.4	53.7	U.S., Brazil, Italy
Pulp and paper machinery					2.7	6.2	298.0	F.R.G., U.S., Switzerland
Materials handling					3.2	3.2	120.5	U.S., F.R.G., Sweden
Electric machinery					14.2	0.6	37.8	U.S., Korea, Taiwan
Electrical measuring apparatus					5.3	1.1	46.3	U.S., F.R.G., Britain
Semiconductor					3.4	0.6	50.7	U.S., Korea, Philippines
Cargo ships					60.7	15.8	-	Britain, Canada, Liberia
Precision instruments					5.9	0.5	19.2	U.S., F.R.G., Switzerland
Other Manufactured Goods	15,254	325	16,065	5.3	456	2.8	40.5	U.S., Korea, Taiwan
Wood chips					68	7.2	150	U.S., Australia, Canada
Plywood					5.6	17.3	208	Korea, Canada, Indonesia
Paper					43.3	8.7	23.2	U.S., Canada, Finland
Textile products	3,832	13	3,180	-17	10	0.3	-24	Korea, China, Italy
Fur garments					4.9	4.2	-41	Hong Kong, U.S., China
Iron or steel	899	6	894	-0.5	25	2.8	337	Korea, Africa, U.S.
Non-ferrous metals	3,416	180	4,480	31.1	243	5.4	35.1	U.S., S. Africa, U.S.S.R.

Table 13: Top 10 Exporting Countries of Manufactured Goods to Japan in Terms of Value

1979				1980				
Ranking	Country	Value ($ million)	Share (%)	Ranking	Country	Value ($ million)	Share (%)	Annual Growth Rate (%)
1	U.S.	8,639	30.0	1	U.S.	10,756	33.5	24.5
2	Korea	2,421	8.4	2	F.R.G.	2,358	7.3	0.9
3	F.R.G.	2,379	8.3	3	Korea	2,221	6.9	8.3
4	Taiwan	1,421	4.9	4	Britain	1,655	5.2	19.2
5	Britain	1,388	4.8	5	Taiwan	1,272	4.0	10.5
6	Switzerland	1,016	3.5	6	France	1,110	3.5	24.3
7	France	893	3.1	7	Switzerland	1,056	3.3	3.9
8	Italy	880	3.1	8	China	976	3.0	24.5
9	China	784	2.7	9	Italy	881	2.7	0.1
10	U.S.S.R.	575	2.0	10	Canada	782	2.4	61.2
	Total	20,396	70.9		Total	23,067	71.8	13.1

Source: The Summary Report: Trade of Japan

APPENDICES

LIST OF APPENDICES

APPENDIX I

Effect of Implementation of New Foreign Exchange and Foreign Trade Control Law (December 1, 1980)

Type of Transaction	Previous System	Present System[1]
CURRENT TRANSACTIONS		
1) Trade Transactions	Generally free - ordinary exports require only certification and ordinary imports only reporting, but the following cases require approval and permission	Generally free (related provisions are not revised). Import and export restrictions on specific goods continue. For other goods, export validation and import reporting are abolished
a. Exports	Strategic materials and other specified goods; nonstandard settlements.	
b. Imports	IQ items; nonstandard settlements, etc.	
2) Non-trade Transactions		
a. Not Trade-Related	Import of specified technology and services involving special settlement methods require approval and permission; others are generally free	For import of specified technology, prior notice.[2] Otherwise free (emergency regulations)
b. Trade-Related	Agency mediation, damage compensation, acquisition of mining rights, etc. require permission; others are generally free	Nearly completely free, except for some mining rights acquisitions, etc. (emergency regulations)
GENERAL CAPITAL TRANSACTIONS		
1) Deposits		
a. Resident Foreign Exchange Deposits		
a) Foreign exchange deposits in authorized banks	Amounts exceeding 3 million require permission, aside from foreign exchange acquired legally for import payments or from export receipts, etc.	Normally free (emergency regulations)
b) Foreign exchange deposits overseas	Requires permission	Requires permission
b. Nonresident Deposit	Establishment of accounts is free, but there are restrictions on credits to accounts	Normally free (emergency regulations include possibility of prohibiting interest payments on yen deposits)
2) Loans and Borrowings		
a. Foreign Loans		
a) Loans by authorized exchange banks	Requires permission (blanket permission for major authorized exchange banks)	Prior notice.[2] (Reporting by major exchange banks will be eliminated. Separate maturity matching regulations are planned for medium- and long-term loans)
b) Loans of other residents to non-residents	Requires permission	Prior notice[2]
b. Foreign Borrowings	Requires approval and permission	Prior notice (emergency regulations)
c. Foreign Exchange Loans Among Residents		
a) Foreign exchange loans to residents by authorized exchange banks	Requires approval and permission	Normally free (emergency regulations)
b) Other foreign exchange loans between residents	Requires permission (generally forbidden)	Requires permission

APPENDIX I (Cont'd)

Effect of Implementation of New Foreign Exchange and Foreign Trade Control Law (December 1, 1980)

Type of Transaction	Previous System	Present System[1]
d. Export and Import Usance		
a) Bank usance	Free. However, permission is required for exports exceeding 6 months and imports exceeding 180 days (capital goods, etc. exceeding 1 year)	Grant of usance by authorized exchange bank to residents: normally free (emergency regulations). Grant of usance by authorized exchange bank to nonresidents and usance grants from financial institutions abroad: free, with prior notice when exceeding 1 year (emergency regulations)
b) Shippers' usance	Free. However, approval and permission is required when standard settlement periods are exceeded	Free. However, approval and permission is required when specified periods are exceeded
3) Guarantees	Free with the exception of guarantees related to external bond issues by local corporations	Normally free (emergency regulations). However, in cases of guarantees related to external bond issues by local corporations, prior notice[2]
4) Purchase and Sale of Foreign Exchange		
a. Purchase and Sale Between Authorized Exchange Bank and Customer	Free, if based on actual requirements	Normally free (emergency regulations)
b. Other Purchases and Sales Among Residents	Requires permission (generally forbidden)	Requires permission
5) Securities Purchase and Sale Between Residents and Nonresidents	Requires approval and permission	Purchase or sale of securities through a designated securities firm is normally free. In other cases, prior notice (emergency regulations)
6) Issue and Flotation of Securities		
a. Issue of External Bonds, etc. by Japanese Enterprises b. Issue of Foreign Yen Bonds in Japan by Nonresidents c. Issue of Euro-Yen Bonds	Requires permission (for b, permission is required for payment of issuance fees)	Prior notice[2]
7) Acquisition of Real Property		
a. Nonresidents Acquisition of Real Property in Japan	Free for residential and office use; business use, etc. requires permission	Prior notice[2]
b. Resident Acquisition of Real Property Overseas	Generally reported in advance	Normally free (emergency regulations)
MANAGEMENT PARTICIPATION CAPITAL TRANSACTIONS		
1) Domestic Direct Investment	Requires approval	Prior notice[2]
2) Direct Investment Abroad		
a. Establishment of Subsidiaries, etc.	Generally reported in advance	Prior notice[2]
b. Loans	Requires permission	

APPENDIX I (Cont'd)

Effect of Implementation of New Foreign Exchange and Foreign Trade Control Law (December 1, 1980)

Type of Transaction	Previous System	Present System[1]
MANAGEMENT BANK SYSTEM		
1) Foreign Exchange Operations		
a. Commencement of Foreign Exchange Operations, etc.	Requires approval	Requires approval
b. Correspondence Arrangements	Requires consent (blanket consent for major authorized exchange banks)	Requires consent
2) Foreign Exchange Position		
a. Spot Positions	Generally, oversold positions are forbidden	Restrictions may be imposed
b. Overall Position (Spot & Forward)	Net positions exceeding certain amounts are forbidden	

Legend: [1] "Emergency regulation" means that restrictions (e.g., licensing) may be imposed under emergency.

[2] With waiting period, during which Minister(s) may suggest or require that the transaction be suspended or some of its particulars changed.

Source: IMF, Japan - Recent Economic Developments, (January 1981).

APPENDIX II

Useful Contacts for Exporters

IN CANADA

Federal Government:

Japan and South Pacific Division
Office of Trade Development (DOJ)
Asia and Pacific
DEPARTMENT OF EXTERNAL AFFAIRS
235 Queen Street
Ottawa, Ontario
K1A 0H5
Tel: (613) 995-7752
Telex: 053-3745

Export Market Policy Division (DPM)
Office of Trade Development Marketing
Policy, Planning and Evaluation
DEPARTMENT OF EXTERNAL AFFAIRS
235 Queen Street
Ottawa, Ontario
K1A 0H5
Tel: (613) 593-6392

Trade Relations Division (TER)
Office of Trade Relations with
Industrialized Countries
DEPARTMENT OF EXTERNAL AFFAIRS
235 Queen Street
Ottawa, Ontario
K1A 0H5
Tel: (613) 996-5381
Telex: 053-3745

North Asia and Pacific Division (GPO)
Bureau of Asian and Pacific Affairs
DEPARTMENT OF EXTERNAL AFFAIRS
125 Sussex Drive
Ottawa, Ontario
K1A 0G2
Tel: (613) 992-0497
Telex: 053-3745

For industry sector branches of the DEPARTMENT OF REGIONAL INDUSTRIAL EXPANSION and branches of other functional departments, see pages 232 to 235.

Regional Offices: (CROs)

If you have not previously marketed abroad, contact any regional trade officer of the DEPARTMENT OF EXTERNAL AFFAIRS at the addresses listed below.

Newfoundland and Labrador

P.O. Box 64
Atlantic Place, Suite 702
215 Water Street
St. John's, Newfoundland
A1C 6C9
Tel: (709) 737-5511
Telex: 016-4749

APPENDIX II (Cont'd)

Nova Scotia	Duke Tower, Suite 1124 5251 Duke Street Scotia Square Halifax, Nova Scotia B3J 1P3	Tel: (902) 426-7540 Telex: 019-21829
New Brunswick	440 King Street, Suite 642 Fredericton, New Brunswick E3B 5H8	Tel: (506) 452-3190 Telex: 014-46140
Prince Edward Island	P.O. Box 2289 Dominion Building 97 Queen Street Charlottetown, Prince Edward Island C1A 8C1	Tel: (902) 892-1211 Telex: 014-44129
Québec	C.P. 1270, Succursale "B" 685, rue Cathcart, pièce 512 Montréal (Québec) H3B 3K9	Tel: (418) 283-6254 Telex: 055-60768
	2, Place Québec, pièce 620 Québec (Québec) G1R 2B5	Tel: (418) 694-4726 Telex: 051-3312
Ontario	P.O. Box 98 1 First Canadian Place Suite 4840 Toronto, Ontario M5X 1B1	Tel: (416) 369-4951 Telex: 065-24378
Manitoba	Manulife House, Suite 507 386 Broadway Avenue Winnipeg, Manitoba R3C 3R6	Tel: (204) 949-2381 Telex: 075-7624
Saskatchewan	2002 Victoria Avenue, Room 980 Regina, Saskatchewan S4P 0R7	Tel: (306) 359-5020 Telex: 071-2745
Alberta and Northwest Territories	Cornerpoint Building, Suite 505, 10179-105th Street Edmonton, Alberta T5J 3S3	Tel: (403) 420-2944 Telex: 037-2762
British Columbia and Yukon	P.O. Box 49178 Bentall Centre, Tower III 595 Burrard Street, Suite 2743 Vancouver, British Columbia V7X 1K8	Tel: (604) 666-1434 Telex: 04-51191

APPENDIX II (Cont'd)

Provincial Governments:	Provincial trade and industry departments (see the appropriate pages of city telephone directories in each province)	
Private Sector:	Canada/Japan Business Co-operation Committee c/o Chairman David M. Culver, President Alcan Aluminum Limited C.P. 6090 Montréal (Québec) H3C 3H2	Tel: (514) 877-2340
	Canada/Japan Trade Council Suite 903, 75 Albert Street Ottawa, Ontario K1P 5E7	Tel: (613) 233-4047
	Canadian Export Association Suite 250, 99 Bank Street Ottawa, Ontario K1P 6B9	Tel: (613) 238-8888 Telex: 053-4888
	Canadian Manufacturers' Association Export Forum, 14th Floor One Yonge Street Toronto, Ontario M5E 1J9	Tel: (416) 363-7261 Telex: 065-24693
	International Division Canadian Chamber of Commerce 200 Elgin Street, 3rd Floor Ottawa, Ontario K2P 2J7	Tel: (613) 238-4000
	Canadian Committee of the Pacific Basin Economic Council Suite 301 200 Elgin Street Ottawa, Ontario K2P 2J7	Tel: (613) 238-4000
Japanese Government:	Embassy of Japan 255 Sussex Drive Ottawa, Ontario K1N 9E6	Tel: (613) 236-8541 Telex: 053-4220

APPENDIX II (Cont'd)

Consulate General of Japan Suite 1210 1177 Hastings Street West Vancouver, British Columbia V6E 2K9	Tel: (604) 684-5868 Telex: 045-1402
Consulate General of Japan Suite 2600 10020-100th Street Edmonton, Alberta T5J 0N4	Tel: (403) 429-3052 Telex: 037-3404
Consulate General of Japan Haldane House 2100 Scarth Street Regina, Saskatchewan S4P 2H6	Tel: (306) 352-2651
Consulate General of Japan Three Lakeview Square, 5th Floor 185 Carlton Street Winnipeg, Manitoba R3C 3J1	Tel: (204) 943-5554 Telex: 07-57533
Consulate General of Japan Suite 1803 Toronto-Dominion Centre P.O. Box 10 Toronto, Ontario M5K 1A1	Tel: (416) 363-7038 Telex: 02-2657
Consulate General of Japan pièce 2701 1155, boulevard Dorchester ouest Montréal (Québec) H3B 2K9	Tel: (514) 866-3429 Telex: 05-25376
Japan Trade Centre (JETRO) Suite 700, Britanica House 151 Bloor Street West Toronto, Ontario M5S 1S8	Tel: (416) 962-5050
JETRO Montréal Office 50 Frontenac, Niveau F Place Bonaventure Montréal (Québec)	Tel: (514) 861-5240, 861-4554

APPENDIX II (Cont'd)

JETRO Edmonton Office
Room 812, Royal Bank Building
10117 Jasper Avenue
Edmonton, Alberta
T5J 1W8
Tel: (403) 428-0866

JETRO Vancouver Office
Room 916, Standard Building
510 West Hastings Street
Vancouver, British Columbia
V6B 1L8
Tel: (604) 684-4174

IN JAPAN:

Canadian Embassy
3-38 Akasaka 7-chome, Minato-ku
Tokyo 107, Japan
Tel: (03) 408-2101
Telex: DOMCAN J22218

Government of Alberta
17th Floor - New Aoyama
Building West
1-1, 1-chome, Minamiaoyama, Minato-ku
Tokyo 107, Japan
Tel: (03) 475-1171
Telex: J28543

Government of Ontario
Suite 1219
World Trade Centre Building
4-1 Hamamatsu-cho 2-chome
Minato-ku, Tokyo 105, Japan
Tel: (03) 436-4355
Telex: J27145

Government of Québec
Suite 501, Sanno Grand Building
14-2, Nagata-cho 2-chome
Chiyoda-ku, Tokyo 100, Japan
Tel: (03) 581-4618

Canadian Chamber of Commerce in Japan
Central P.O. Box 2089
Tokyo, Japan
Tel: (03) 585-9441

FEDERAL GOVERNMENT - SECTORAL CONTACTS

The following is a functional listing, for each industry sector identified as a priority in Japan, where exporters can seek more detailed background information. Unless indicated otherwise, sectoral contacts are in the DEPARTMENT OF REGIONAL INDUSTRIAL EXPANSION (DRIE) and are located at 235 Queen Street, Ottawa, Ontario K1A 0H5. The Area Code is 613 and the telex number is 053-4124.

APPENDIX II (Cont'd)

Forest Products	
(Primary Wood Products)	Primary Wood Products Division (RIB) Resource Industries Branch (992-0068)
(Manufactured Wood Products)	Manufactured Wood Products Division (RIB) Resource Industries Branch (995-7134)
(Pulp and Paper Products)	Pulp and Paper Division (RIB) Resource Industries Branch (992-0065)
Petrochemicals	Petroleum and Industrial Chemicals Division (CHE) Chemicals Branch (992-1758)
Nuclear Reactors and Uranium	
(CANDU)	CANDU Marketing Secretariat (SCM) DEPARTMENT OF EXTERNAL AFFAIRS 235 Queen Street Ottawa, Ontario KIA OH5 (996-0580)
(Uranium)	Energy Group, DRIE (996-4448)
Electronics (Telecommunications)	Telecommunications Division (ELE) Electrical and Electronics Branch (593-4481)
(Computer Peripherals)	Information Processing and Technology Division (ELE) Electrical and Electronics Branch (593-4481)
(Telidon)	Telidon Marketing Secretariat (STM) Trade Development Sector DEPARTMENT OF EXTERNAL AFFAIRS 4th Floor, 101 Sparks Street Ottawa, Ontario Tel: (613) 593-5325 K1A OH5 Telex: 053-3745

APPENDIX II (Cont'd)

Agriculture and Food Products

(All Products)	Marketing and Economics Branch AGRICULTURE CANADA Sir John Carling Building 930 Carling Avenue Ottawa, Ontario K1A 0C5 (995-5880)
(Cereals, Grains)	Cereal Grains Division Grain Marketing Office (GMO) (995-8374)
(Oilseeds and Products)	Oilseeds Division (GMO) Grain Marketing Office (995-7871)
(Fish Products)	Fishery Products Division Food Branch (FPB) (995-8107)
	International Trade and Development Branch DEPARTMENT OF FISHERIES AND OCEANS 240 Sparks Street Ottawa, Ontario K1A 0E6 (995-2188)
(Livestock, Meat Processing, Cheese Products)	Animal Products Division Food Branch (FPB) (995-8107)
(Processed Food and Beverage Products	Grocery Products Division Food Branch (FPB) (995-8107)
(Forage Seeds, Dehy Alfalfa)	Plant Products Division Food Branch (FPB) (995-8107)
(Peat Moss)	Industrial Minerals Division (RIB) Resource Industries Branch (992-1581)

Marine Industries

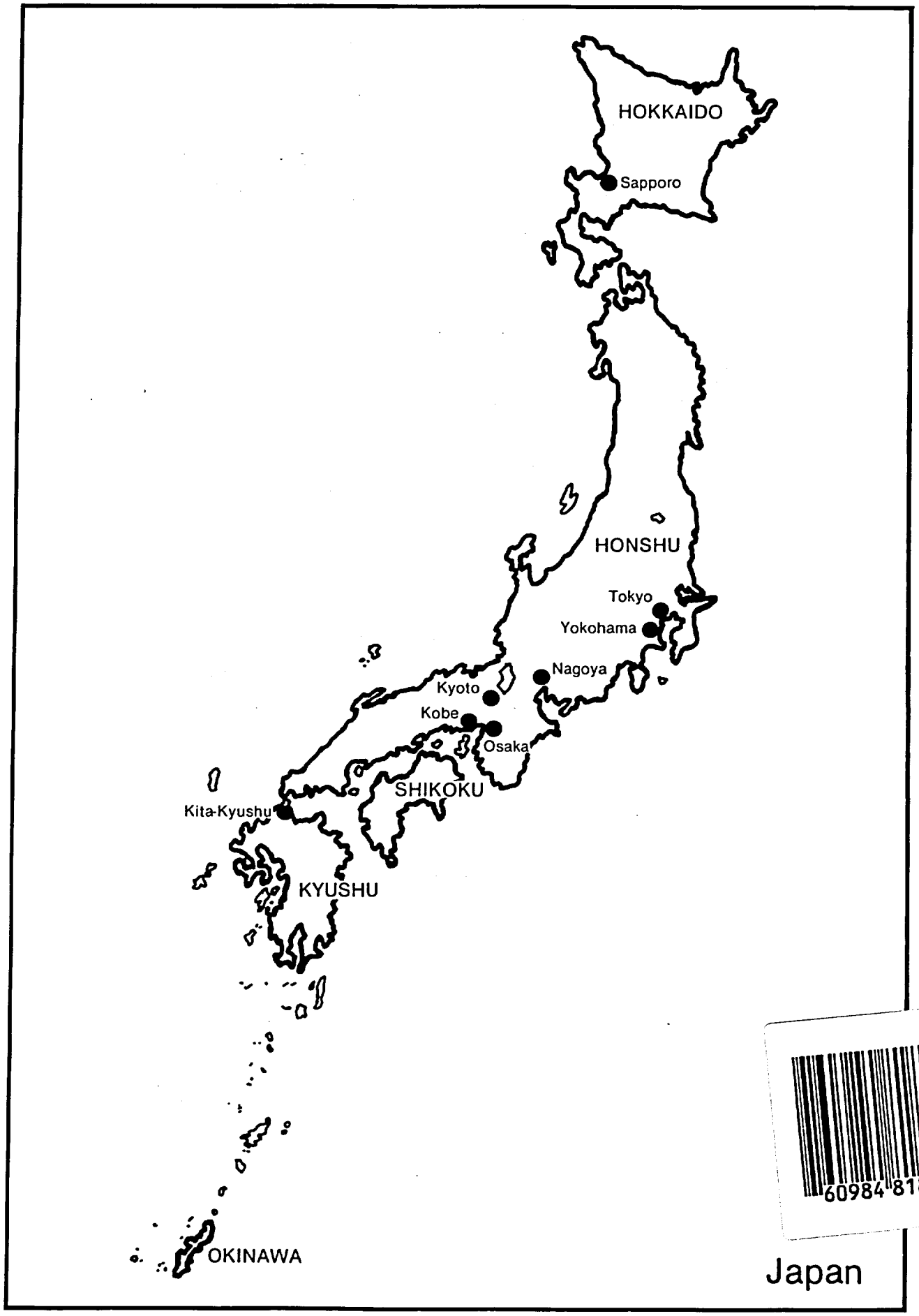
(Ocean Industries)	Ocean Industries Division (AMB) Aerospace and Marine Branch (995-3201)
(Ship Components Parts, Ship Repair)	Ships and Components Division (AMB) Aerospace and Marine Branch (995-3201)

APPENDIX II (Cont'd)

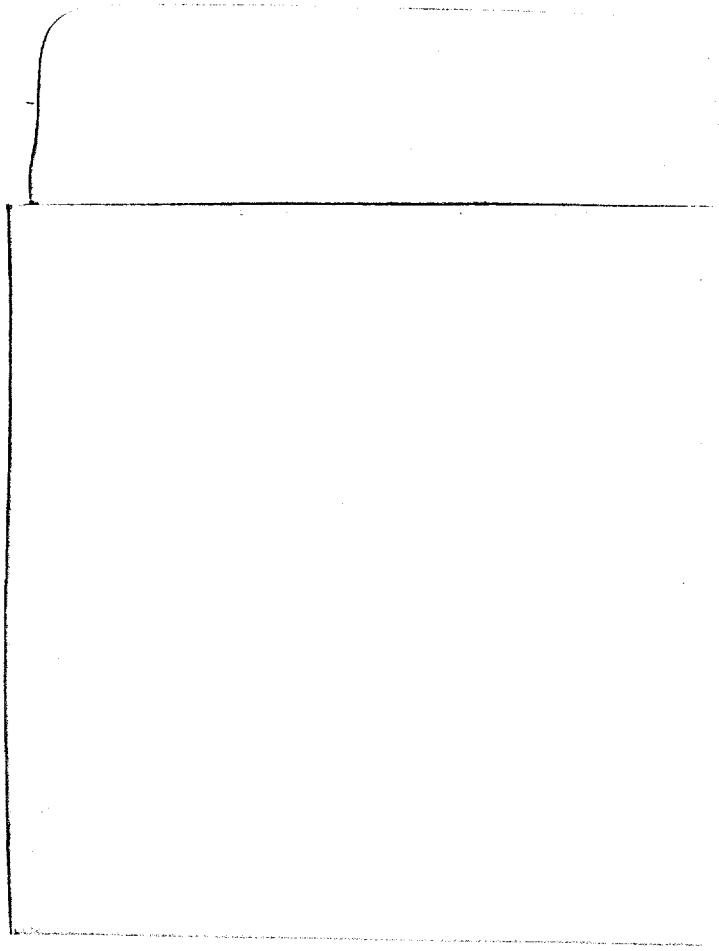
Auto Parts	Automotive Parts Division **(STB)** Surface Transportation Branch (995-3304)
Coal	Industrial Minerals Division **(RIB)** Resource Industries Branch (992-1581) International Energy Relations Branch DEPARTMENT OF ENERGY, MINES AND RESOURCES 580 Booth Street Ottawa Ontario K1A OE4 Tel: (613) 995-9351
Non-Ferrous Metals and Minerals	Non-Ferrous Metals Division **(RIB)** Resource Industries Branch (992-0088) Mineral Development Branch DEPARTMENT OF ENERGY, MINES AND RESOURCES 580 Booth Street Ottawa, Ontario K1A OE4 Tel: (613) 995-9466
Manufactured Products	
Consumer Goods:	
(Furs/Sportswear)	Clothing Division **(TCP)** Textiles and Consumer Products Branch (992-1048)
(Jewellery/Sporting Goods)	Leisure Industries Division **(TCP)** Textiles and Consumer Products Branch (992-7948)
(Floor Coverings)	Textile Division **(TCP)** Textiles and Consumer Products Branch (992-1045)
Industrial Goods:	
(Health Care Products)	Health Care Products Division **(CHE)** Chemicals Branch (995-2562)
(Instrumentation)	Micro-electronics and Instrumentation Division **(ELE)** Electrical and Electronics Branch (593-4481)
(Aerospace)	Aerospace Directorate **(AMB)** Aerospace and Marine Branch (995-3201) Office of Trade Development Defence Programs **(DDP)** DEPARTMENT OF EXTERNAL AFFAIRS 235 Queen Street Ottawa, Ontario (995-8491) K1A OH5

GLOSSARY OF ABBREVIATIONS

c.i.f.	cost including freight charges
CJBCC	Canada/Japan Business Co-operation Committee
COMDP	Co-operative Overseas Market Development Program
CTC	Canada Trade Centre (Tokyo)
DEA	Department of External Affairs
DREE	Department of Regional Economic Expansion
DRIE	Department of Regional Industrial Expansion
EDP	Enterprise Development Program (ITC/DRIE)
EEC	European Economic Community
f.o.b.	free-on-board
F.R.G.	Federal Republic of Germany
FY	Fiscal Year
FIRA	Foreign Investment Review Agency
ITC	Department of Industry, Trade and Commerce
JEC	Joint Economic Committee
JETRO	Japan External Trade Organization
MITI	(Japanese) Ministry of International Trade and Industry
MOAFF	(Japanese) Ministry of Agriculture, Fisheries and Forests
MOF	(Japanese) Ministry of Finance
PEMD	Program for Export Market Development (DEA/DRIE)
Post	Canadian Embassy in Tokyo, Japan
SITC	Standard Industrial Tariff Classification (Japan)
TDO	Japan and South Pacific Division, Office of Trade Development Asia and Pacific DEA



Japan



Canada

(aussi édité en français)