

CANADA COMMERCE

January 1981



The Philippines Welcomes
Canadian Business — Page 1

Joint Ventures: One
Company's Views — Page 6

ISSN 0068 • 7251

Canada Commerce
January, 1981

**Published by the Department of
Industry, Trade and Commerce
Established 1904**

The Honourable Herb Gray
Minister of Industry, Trade and Commerce

The Honourable Charles Lapointe
Minister of State
for Small Businesses

The Honourable Edward C. Lumley
Minister of State
for Trade

Editor:
Anna Hibberd

Contributing editors:
Don Wight
Bob McDonell
Shirley Plowman
Lillian Jones

Designer:
Stephen Shewchuk

Correspondence to:
Canada Commerce (98)
Department of Industry, Trade and
Commerce
Ottawa, Ontario. K1A 0H5

Telephone:
(613) 995-7489

Copyright:
Material appearing in this magazine
may be reproduced with credit to
Canada Commerce.

Photo credit:
Image Bank of Canada

Juergen Schmitt, cover
Harald Sund, page 1

**Please note that Canada Commerce is
available free of charge in Canada
only to interested Canadian manufac-
turers and business persons.**

Publié aussi en français

Content	Page
Philippines Welcomes Canadian Businessmen	1
In Retrospect: Pacific Rim Conference	4
Joint Ventures: An Inside Story	6
Interfirm Comparison Program & Productivity Performance	10
Waferboard Industry Doesn't Waffle	12
Economists' Corner	14
Canada/France Economic Commission	16
Cost Recoverable Technical Assistance (CRTA)	17
Getting Off the Ground!	18
Success is in the Bag	19
Small is Big: Quebec Success Stories	20
Trade Fair Round-Up	22
Multilateral Project Opportunities	23

Editorially speaking. . . .

Getting the New Year off to a potentially profitable start is the special welcome extended to Canadian businessmen from The Philippines, an area that represents an import market of some \$7 billion — focused in just those sectors in which Canada has particular experience and expertise!

And those interested in or considering joint ventures should find the article beginning on page 6 of particular value. A reprint of the speech by H.O. Coish, vice-president of Canada Wire and Cable, delivered at the recent Pacific Rim Conference, is an excellent summary of the steps this company followed in establishing joint ventures in numerous countries.

Also geared to improve your company's efficiency is the Interfirm Comparison Program (page 10). And, if you are trying to get off the ground, "the story of how one company made it" (page 18) should prove helpful — as should the article (page 17) on the Cost Recoverable Technical Assistance Program.

All this and more. . .

An import market of some \$7 billion focused in just those sectors in which Canada has particular experience and expertise. . . .

The Philippines/Special Welcome for the Canadian Businessman

**Report by Colin S. Russel
Trade Commissioner — Philippines**

It is some 460 years since the Spanish explorer Magellan, out for a share of the eastern spice trade, stumbled onto these islands to begin the weaving of a Malayo-Polynesian people into the fringes of the Spanish trading empire.

It is some 80 years since the Americans purchased the Philippines along with Puerto Rico and Guam from Spain for US\$20 million. This followed the Spanish/American War and heralded the introduction to the Philippines of an American administration, commercial influence and universal education in the English language — all this to an already culturally mixed society.

Yet, after "400 years in a convent followed by 50 in Hollywood," this least Asian of the Asian nations offers the visitor the warmest of welcomes available on earth today. "Mabuhay" — and the open, smiling, Filipino transcends his colonial past to welcome the visitor as he would a member of his own extended Asian family.

The warmth of the welcome is often totally disarming to the uninitiated businessman who may find himself further off balance as he discovers that the welcomer simultaneously possesses a Harvard MBA and several decades of hard-nosed practical experience in an American-oriented business organization.

This archipelago of more than 7,000 islands which separates the Pacific Ocean from the South China Sea now supports a \$30 billion economy which has achieved an average real growth rate of 6.3 per cent over the last decade. It represents an import market of some \$7 billion focused in just those sectors in which Canada has particular

experience and expertise — natural resources, energy development, transportation, telecommunications and agro-industry.

In fact, Canada is the fifth largest foreign investor in the Philippines with substantial holdings in the mining, automotive and petroleum fields. Canada is also well known to the Philippines through the 100,000-strong Filipino community in Canada and the heavy flow of Filipino students to our schools and universities. Canada is widely recognized as a sophisticated nation having the latest in North American technology deliverable without the "colonialist" overtones often associated with the American and the Japanese presence in the Philippines.

Yet Canadian exports to the Philippines represent less than 2 per cent of total Philippine imports — some \$80 million in 1979. Are the Filipino markets illusory? Is the competition too intense? Why have

Canadian product and service suppliers not raised the Canadian profile in the Philippines to the far higher plateau they deserve?

Much can be explained by the fact that doing business in the Philippines is not only dependent on favorable price, technical specifications and delivery but counts a great deal on personal relationships between buyer and seller. Developing the "total package" to be sold in this market involves a degree of commitment, persistence and tenacity which Canadian firms often either do not recognize or are unwilling to accept.

Despite the far greater European experience in this sort of environment and the well established presence of Japanese and US interests in the Philippines, Canadians who have approached the Philippine market purposefully and with patience have been amply rewarded. More often than not these firms have established a local agent, representative or associate.

The Philippines is currently launching a program of 11 major industrial projects worth some \$8 billion, is driving to expand exports — particularly in non-traditional areas — and has just announced a crash energy development program which will be spending some \$10 billion to drastically reduce the Philippines' dependence on imported oil by 1985. The execution of these pro-



grams and the infrastructure and support investment required to carry the central projects themselves, leads to significant opportunities for Canadian business.

In addition, the Philippine mining sector remains a key growth area with some 70 operating mines and more than 150 mining sites under development. The agriculture sector, which still accounts for some 30 per cent of GNP and more than half of total exports, also seeks foreign participation.

Over the medium term, prospects for Canadian suppliers appear particularly bright in the mining, energy, power generation and distribution, telecommunications and agro industrial fields.

The Philippines' abundant agricultural, mineral, institutional and human resources, combined with

relative political stability and financial orthodoxy, have combined to provide a basis for foreign investor and lender confidence. Several Canadian banks are highly active in the Philippines and Canada's Export Development Corporation continues to indicate its willingness to further expand its loan portfolio in support of Canadian-supplied equipment and services. The Canadian government trade services have been taking a more aggressive approach to identifying specific market opportunities in the Philippines and the recent visits by Canadian Minister of Agriculture Whelan and Minister of Trade Lumley have served to further raise the profile of Canada among Philippine economic decision makers.

In short, all elements required for a successful Canadian attack on the

Philippine market are available to the Canadian exporter. It remains for the Canadian firms to examine the prospects in more detail. In this respect, the Commercial Division of the Canadian Embassy in Manila is available to Canadian businessmen for a wide range of information and advice regarding the potential for their products in the Philippine market. We would be delighted to provide you with assistance in assessing the Philippine potential and in preparing for your market prospection visit to Southeast Asia.

**Commercial Division
Canadian Embassy**
4th Floor, Cibeles Building
6780 Ayala Avenue
Makati, Metro Manila (3117)
P.O. Box 971 MCC
Philippines
Telex: 63676 DOMCAN PN

The Asian Development Bank

Manila is the seat of the Asian Development Bank founded in 1966 to grant loans to regional developing member countries and to provide technical assistance in the preparation of loan of projects. Each year, the ADB commits somewhat over one billion dollars to selected development projects in the region as well as mobilizing the resources of other institutions through co-financing activities.

The activities of the Bank, patterned after the World Bank group, have traditionally concentrated on the agriculture and agro-industry sector for about one-third and the power sector for approximately one-quarter of its lending program. Other major programs have been associated with national development banks, transport and communications, water supply, education and health, and urban development. About two thirds of Bank lending is from ordinary capital resources financed by borrowings on the world capital markets with interest rates varying but recently running in the 8-10 per cent range with maturity of 10 to 30 years. About one-third of Bank lending is aimed at developing member countries with the lowest per capita income with projects and programs funded from special resources providing no interest loans over 25- to 50-year periods.

In implementing these projects, the Bank and its borrowers utilize both consulting services and equipment procured exclusively from member countries. Con-

sultants are hired by the ADB to participate in its technical assistance operations and to assist in the Bank's project preparation, fact finding and appraisal missions. Procurement decisions both for services and for equipment remain with the executing agency in the country concerned. However, selection procedures are strictly laid down by the ADB and project preparation and execution are guided and closely monitored by the Bank's professional staff.

Canada is a founding member of the Bank and the fourth largest developed country donor after Japan, U.S. and West Germany. There are approximately 20 Canadians on the staff of the ADB. Over the years, Canadian firms have obtained some \$90 million of business from ADB projects and have been particularly successful in providing consultancy services. In an effort to broaden this success to the supply of equipment for the execution of Bank projects, an ADB procurement mission recently visited Canada staging seminars in Montreal, Toronto and Vancouver. The purpose of this mission was to further highlight to Canadian manufacturers the potential of the ASDB project market, to outline Bank procedures and the programs currently in the pipeline for execution over the coming months and to emphasize the need for Canadian firms to establish more regular and direct contact with the ASDB project preparation process in Manila.

The Commercial Division of the Canadian Embassy in Manila has developed a special program for informing Canadian businessmen of the programs and procedures of the ADB and to assist in obtaining up to date and timely information and contact with ADB decision makers. Liaison visits from our office in Manila to regional project activity centers assure that our office is not only fully conversant with the projects in the ADB pipeline but is in a position to fully support the efforts of Canadian businessmen and our other Trade Commissioner posts in the region in developing the market potential of the ADB projects.

Canadian businessmen interested in learning more about the ASDB, in registering with the Bank and in including a review of ADB opportunities on their next visit to the region are encouraged to establish direct contact with the Commercial Division of the Canadian Embassy in Manila.

THE 11 MAJOR INDUSTRIAL PROJECTS

Copper smelter
Phosphatic fertilizers
Aluminum smelter
Heavy industries
Integrated steel mill
Petrochemical complex
Diesel engine manufacturing
Cement industry expansion
Coconut industry rationalization
Alcogas
Integrated pulp and paper

Canadian/Philippine Trade

Major Canadian Exports (\$ x 1000)

Description	1979	1978	1977	1976
	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
Zinc blocks, pigs, slabs	7,915	7,693	919	699
Polyethylene resins	5,344	4,336	242	50
Wood pulp	4,155	4,396	3,499	1,920
Iron ore, concentrated	4,024	1,245	4,361	—
Man-made fibres	3,138	1,205	562	314
Ammonium nitrate	3,045	293	—	—
Special industry machinery	2,971	—	—	38
Parts and accessories for motor vehicles	2,889	1,843	378	502
Malt	2,720	567	1,496	—
Crushing, milling machinery & pts	2,447	1,445	52	155
Infant and junior food	2,391	572	—	—
Telephone apparatus equipment & pts	2,307	1,347	2,997	1,234
Potash	2,044	2,444	2,006	2,225
Mining machinery equipment & pts	2,036	1,106	379	385
Alcohols and their derivatives	2,023	1,215	—	—
Sulphur, crude or refined	1,998	502	135	852
Motor vehicles	1,890	4,583	—	—
Plastic and synthetic rubber, not shaped	1,574	996	219	50
Files and rasps	1,345	760	538	—
Asbestos	1,339	1,189	1,016	515
Sawmill machinery equipment & pts	1,104	153	171	336
Models for demonstration etc. & pts.	1,060	6	195	—
Metallic salts and inorganic	1,011	599	515	329
Computer accessories and pts	798	540	414	680
Transformers & pts	698	353	—	—
Electric motors	675	11	4	60
Broadwoven synthetic fabric	636	161	3	10
Switchgear & protect equipment & parts	613	593	2	—
Air & gas compressors & parts	547	349	474	—
Office machines equipment & parts	519	117	5	—
Construction machinery and equipment	500	1,276	1,165	804
Milk powder skim milk	105	6,329	5,949	574
Copper refinery shapes	331	3,466	1,243	—
Trucks and chassis	129	2,424	3,610	2,531
Aircraft engines and pts	70	1,145	345	831
Aluminum pigs, ingots, shots, slabs, etc.	300	1,012	—	183
Non-metallic minerals	108	682	—	—
Papermakers felts, textiles	345	657	138	199
Pulp and paper industry machinery	137	646	646	—
Power boilers, equipment and pts	150	573	527	—
Red spring wheat	—	—	31,093	17,370
Cattle hides, raw	101	151	726	—
Man-made fibres	18	24	611	314
Commercial telecommunication equipment	222	493	605	3,303
Insulated wire and cable	186	155	246	1,746
Gem and ornamental stones	—	5	—	999
Metal and products	—	—	—	852
Total Selected Items	67,958	59,717	67,486	40,060
Other Items	16,784	12,743	12,005	10,903
Total Exports	84,742	72,460	79,491	50,963
Percentage of Selected Items/Total	80%	82%	84%	79%

For two action-packed days in late November, 1980, there met in Vancouver a goodly group of Canadian businessmen, academics, provincial government ministers and officials, their federal government counterparts and members of Canada's Trade Commissioner Service. They had come from all across Canada to attend the Pacific Rim Opportunities Conference, there to examine Canada's relationships in trade, culture and development with the countries of that area. On the following pages Canada Commerce presents some of the deliberations of the Conference and takes a look at the concrete developments — developments which it is hoped Commerce can follow in subsequent issues.

Pacific Rim Conference in Retrospect

While 250 participants, mostly businessmen, were gathered in Vancouver, interest was high across the country. This was evident to the group of Canadian trade commissioners posted in Pacific Rim countries which undertook a tour of provincial capitals (Montreal was substituted for Quebec City) immediately following the conference.

With the objective of highlighting the excellent prospects for greater economic co-operation with the Pacific Rim in exports, joint ventures and technology transfers, the seven trade commissioners — carefully selected to represent Canada's major market interests in the region — started off on their three-week tour. Small and medium-sized firms, either established exporters or those new to exporting, were encouraged to seek appointments with them through IT&C regional offices. First stop was Halifax — where IT&C Regional Director General, Ed Coolen, said the "seminar held here was excellent. We had a turn-out of our most dedicated exporters."

Attending the seminar, which saw more than 30 interests from the Maritimes represented, were senior trade commissioners from Australia, New Zealand, Japan and China. Each commissioner outlined trade opportunities in their respective areas.

A highlight of the seminar in Halifax was that, after the trade commissioners expressed their views, one-half hour discussion groups were arranged with the companies attending.

"These discussions," said an enthusiastic Mr. Coolen, "were found to be of great value. And senior company representatives with whom I spoke thought it



a very, very fruitful session."

Despite the geographic distances involved, Mr. Coolen indicated some local companies are already doing business in the Pacific Rim and many more are intending to. "Some companies," he added "are even teaming to bid on a multi-million dollar resources vessel for Australia. They have the capability to meet delivery and to bid against international competition."

CANADA-KOREA BUSINESS COUNCIL

The conference was also the launching pad for the formation of an organization

of Canadian and South Korean businessmen to stimulate increased trade between the two countries. The establishment of the Canada-Korea Business Council was announced by Basil Beneteau, president of Northern Telecom, and chairman of Canadian membership of the Council.

"South Korea is Canada's third largest market in Asia, after Japan and China," stated Mr. Beneteau. "Last year, our total trade amounted to almost \$1 billion, and we see the potential for a substantial increase."

The federal minister of trade, Ed Lumley, speaking at the Conference, called the new organization a key element in improving Canada's trading relations in the Pacific area, "which represents an area of tremendous economic growth, and substantial economic opportunity for Canada."

Traditionally, Korea has looked to Canada for raw materials and resources. Manufactured goods represented about 19 percent of Canadian exports to Korea last year.

"Our natural resources, particularly from western Canada, will continue to represent the bulk of our exports. But it is becoming apparent that Korea is increasingly interested in tapping our resources of technology as well. There are expanding opportunities for more diversified trade with Korea, which has a booming economy and a population of 38 million," said Mr. Beneteau.

The Canada-Korea Business Council will bring together representatives from both countries in an effort to stimulate understanding of each nation's economy and culture, and to foster closer personal and business relationships.



The proposal, now being studied by the federal government, calls for the establishment of a Pacific Foundation, funded by government, which would bring together federal and provincial governments, business and other private sector organizations, and the academic interests. The organization would study in depth, the Pacific Co-operation concept mentioned at the Conference. . .

- 1. Support to & coordination of the efforts of business organizations trade associations institutions professional associations**
- 2. Loaned personnel and secretarial management support.**
- 3. Source and exchange of information.**
- 4. Briefings of incoming and outgoing delegations.**
- 5. Training programs and exchange of specialists.**
- 6. Special studies, speakers and seminars.**

He continued "here in Vancouver, we have the port, Canada's foremost outlet to the Pacific. We have an Asian centre. We have an institute of Asian research. We have a board of trade which has gone far in developing an understanding of, and a commitment towards, trade with the nations of the Pacific. The elements of the foundation are here and ready for assembly. We have an opportunity here waiting to be put to use, an opportunity to show our fellow Pacific nations that Canada is serious about our Pacific partnerships; that we mean to be fully involved; and that we mean to succeed in harmony with our Pacific friends.

"Much of the work is already being done but how much better it could be done with a little assistance from a Pacific foundation.

"Finally, I believe a development of this nature added to a continuance of the existing extensive effort and co-operation, could cause the next generation, when looking back at Canada from abroad, to point with pride and say:

"That's my Canada!!" "

The Korean membership in the Council is organized through the Korean Federation of Industry, under the chairmanship of Mr. Chang Soon Yoo. Mr. Yoo, chairman of one of Korea's largest conglomerates, the Lottee Confectionery Company, is a former minister of commerce and industry, and one of Korea's leading businessmen. The first general meeting of the Canadian and Korean members of the Council will take place in Korea next spring.

As an example of high-technology trade opportunities, Mr. Beneteau cited the contract for telecommunications transmission systems currently under negotiation between Northern Telecom and the Korean government. Northern Telecom was selected from a number of international competitors as the supplier of the equipment, which could have a value of up to \$90 million. Canada's largest high-technology sale was a Candu nuclear reactor, worth more than \$300 million sold to Korea in 1976.

"The current emphasis in Korea is on heavy industry, and there is a market both for capital goods and for the consulting expertise to develop industries such as steel and chemical production, and nuclear power generation," said Mr. Beneteau.

"Of course, the Korean market for our raw materials will continue to represent the main element of our export trade and we hope to be able to expand this to include foodstuffs," he added. Currently, Canada's principal exports to Korea include coal, wood pulp and animal pelts.

Pacific Foundation Proposed

The third and what will perhaps prove to be the most important result of the Pacific Rim Conference was contained in the conference summation presented by its vice-chairman, E.L. Harrison, vice-chairman, British Columbia Packers Limited. The proposal, now being studied by the federal government, calls for the establishment of a Pacific Foundation, funded by government, which would bring together federal and provincial governments, business and other private sector organizations, and the academic interests. The organization would study in depth, the Pacific Co-operation concept mentioned at the Conference by Ed Lumley, minister of trade; Mark MacGuigan, secretary of state for external affairs; and Senator Bud Olson, minister of state for economic affairs. Outlining the objectives of such a Foundation, Mr. Harrison listed:

Joint Ventures and Bilateral Trade Agreement

With the increasing emphasis being given to Canada's export position, many companies are considering the possibility of joint ventures to overcome the reluctance of many countries to import fully manufactured goods. To assist such companies in their deliberations Canada Commerce is reprinting the remarks of H.O. Coish, vice-president of Canada Wire and Cable, to the recent Pacific Rim Conference. It is an excellent summary of the steps followed by Canada Wire and Cable in establishing joint ventures not only in the Pacific Rim but in several countries in South America, in Mexico and Africa.



When a company develops to the point that it has a strong position in the domestic market, an alert and aggressive management will look for potential new markets in a foreign country. For a number of reasons it may not be profitable, or in some cases even possible to sell into certain foreign countries. There are many reasons for this but one of the most common is that the foreign country is attempting to develop its own industrial structure and has raised tariffs to a very high level to encourage local manufacture. Canada Wire and Cable faced this situation in the very early '60s. The company had been exporting to countries in South and Central America and around the world since the mid 1930s. Suddenly it became apparent that, in Latin America, doors were about to be closed to the products the company had sold for years. The company

was approached at that time to sell technology in wire and cable to an entrepreneur in Venezuela who saw an opportunity for his own company to gain a share of the local market in wire and cable by manufacturing there. However, he lacked the technology. It is to the great credit of the management of Canada Wire at that time that they offered to participate in the new venture and to supply the technology. A key element in the offer was that Canada Wire would take a **minority** holding in the new company. The offer was accepted and our company became involved in its first joint venture in 1962. In all joint ventures since that time Canada Wire has taken, as a matter of policy, a minority position in each of our overseas joint ventures. We have joint ventures in Venezuela, Colombia, Mexico, Dominican Republic, Nigeria, Australia and New Zealand.

Our experience has been that international joint ventures cannot only be profitable but that they strengthen the domestic operation in the managerial, technical and commercial sense.

It is important, of course, that any business contemplating a foreign investment carefully define its short and long term objectives and be very clear on the purpose and expectations of such an investment. It is equally important that the Company carefully assess the strengths and weaknesses of its financial resources, technical resources and management depth. Foreign investments can be very rewarding, but they can be very demanding on the resources of the investing company.

In these remarks I will deal with foreign investment in the form of a joint venture. While joint ventures have some disadvantages, they have many advantages. An important advantage is that the local partner knows the host country laws, customs, government policy and regulations. In addition, the local executives of the company are native to the host country and are seen as citizens when dealing with the government.

The first step toward a joint venture investment is a market study. It is possible to narrow down the choice of potential host countries by preliminary studies done right here in Canada. Sources of information are, Department of Industry, Trade and Commerce, which includes the very valuable help of the Trade Commissioner Service, the Canadian International Development Agency, Trade Associations, Chambers of Commerce, trade publications and so on.

Having selected a potential foreign market, the next step is to visit the chosen country and do an on-the-spot market study as carefully as you would do a market study for a new product line, or a new plant investment in Canada.

You will want to be assured that your product meets the market need or can be adapted to it in terms of specifications and designs. You will want to know price levels, the distribution system, the transportation system, who the competitors are locally and who is behind them, and their strengths and weaknesses. If you plan to begin the venture by shipping parts from Canada for assembly, you will want to know the customs formalities, the valuation for duty, the efficiency of the ports of entry and so on. You will find during this exercise that there are countries that do not wish to have your particular product or your particular plant. These countries have concluded that additional plants in your product line will only fragment the market and threaten existing companies.

If you plan to sell to government power or telephone utilities, do not assume that you will have an equal

and fair chance to bid on tenders; very carefully check with the authorities that you have a chance to become an authorized supplier. You will also want to determine whether language will present any serious problems.

If you decide to test the market by exporting from Canada, you must choose your agent carefully, assuring that he has the technical skills as well as the marketing skills to represent you well. In reaching agreement with your agent, you must have in mind your longer term goal of local manufacture so that the length of your agreement with the agent may be short term or long term.

During the market studies, attention will be also given to the investment climate in the new market. It is important to determine that your investment will be welcomed by the host country. I have mentioned that there may be reasons why a host country may not wish an additional producer in your product line. The host country will want assurances that you will be a desirable corporate citizen that conforms to the economic and social goals of the country.

In general, governments now appreciate that foreign investment can, and in nearly all cases does, bring substantial benefits to their economies. This is particularly true in the case of developing nations. However, it is necessary to keep in perspective the objectives and desired benefits which are sought by the host government through the investment. Such benefits may be increased employment or the development of the resources of the country.

Foreign investors must be sensitive to the economic and social goals of the host country and act as good Corporate citizens. To this end, I commend to you and to governments seeking investment the "Pacific Basin Charter on International Investments" prepared and adopted in 1978 by the Pacific Basin Economic Council.

I should say at this point that my remarks, though slanted toward joint ventures in another country, are intended to consider conditions for joint ventures with a foreign partner in Canada, so we should keep in mind the nature of the investment climate in Canada.

You will appreciate that in the eyes of government, foreign investment is not necessarily desirable in every case nor is it always without costs. The value of foreign investment must be judged by criteria developed by each nation. These criteria include the creation of new jobs, regional development, development of skills, benefits to local suppliers, the development of local technology and others.

In addition to discussions you should have with host country government officials, you are well advised to discuss the investment climate with local banks, Cana-

dian Banks and with Foreign investors already operating in the country you have chosen.

As part of the investment environment, you will want to determine the availability of local skills at the factory operating and maintenance level and at the administrative level. It is important to determine local educational and training facilities.



When the investor has decided to establish a manufacturing facility in a foreign country or has decided to invest in resource development, he faces the **very** important task of choosing a partner. Several countries require foreign investors to hold a minority interest in partnership with local residents. This requires very careful identification and selection of appropriate partners. In the case of Canada Wire, this has continued to be the most important consideration of any involved in the establishment of a joint venture. Key to this choice is identity of interest in the short term and in the long term. Complementary characteristics and complete mutual confidence are crucial. My company's experience indicates that a period of a year or more is not an excessive amount of time to spend in establishing the relationship. Many potential problems which arise out of a lack of understanding or the absence of a common interest can be identified in the course of an extensive and extended mutual evaluation process. Differences can be resolved or can be the basis for the withdrawal from a proposed partnership. For example, careful evaluation may identify common short term goals but quite different long term goals. As I mentioned earlier, Canada Wire has a policy of taking a **minority** interest in overseas partnerships. You will understand the importance we place on choosing the right partner.

My company believes that the joint venture should be managed by nationals. It is therefore important that the partners demonstrate first-class management skills. Our experience has been that partners can be found with management skills as high as those to be found in Canada.

Local nationals are sensitive to the political and economic factors at work in the environment in which the company operates and are better able to represent that company to the customers, to the government and to the people. While our company may provide short term expertise in some aspect of the business, reliance should be placed on local management.

No partnership agreement can be put down by lawyers and accountants and be made to work. There must be a meeting of the minds of the partners and they must be able to find ways to resolve differences. On this point you, as a partner, must in certain circumstances be prepared to stand up and be counted.

People from different cultures can work together. In our Nigerian joint venture, the partners are Nigerians, Hong Kong Chinese and Canadians. The venture works well. One reason it works well is because the partners continue to need each other. This is true in our other joint ventures and is a necessary characteristic.

We expect the partner or partners to be actively engaged in the business, not businessmen interested in investing money alone. We expect the partner to hold a very substantial equity in the venture.

You will, of course, need your own lawyer in the host country, and you will assure your own interest in the selection of members of the Board of Directors.

Before making a foreign investment, the investor should assure that his domestic financial house is in order. The foreign investment, particularly in the early years, may require more funds than initially anticipated. This suggests that the partner also have a strong financial position.

The investor must respect the foreign exchange policy and regulations of the host country and have this in mind when raising a portion of the equity in the host country currency. Using a portion of local currency reduces your foreign exchange risk. Canadian banks are valuable advisors on the matter of financing.

It is important, of course, for you and your partner to agree on the pro forma of your early years of operating performance.

Attention should be given to the host country tax laws and regulations. Advice should be sought on corporate tax rates, withholding taxes, sales taxes, the

taxing of export income, tax incentives for new business and tax treaties between Canada and the host country so that your return on investment does not suffer from double taxation.

During the planning of the manufacturing or resource resource development facility, careful attention must be given to the cost of building the facility in the host country, the government policy on the entry of machinery and on the entry of specialists to install the machinery and on the entry of specialists to train the local operators of the machinery. Many countries have strict rules on these matters, not all of them realistic.

Investors must determine the host country laws on industrial relations and minimum wages and must allow for lower initial rates of productivity.

The partnership must assure that local skills are available to maintain and repair machinery.

The foreign investor, in general, is bringing technology to the partnership and must be prepared to commit human resources to the design of the plant and equipment and **continuing** long term technical support to the venture.

This leads to the issue of the transfer of technology.

In recent years this has become an international issue. In the North-South dialogue, the "Group of 77" has claimed that the economic disparities between the developed nations and the Less Developed Nations will not be reduced until technology is transferred to the LDCs. Moreover, they say that technology should be given **free**, that is without charge to the poorer nations. I do not agree with this position. This is a very complex issue and I do not intend to deal with it here, suffice it to say that technology has real economic value both to the developed country and potentially to the Less Developed Country. Technology can be transferred in a way that is of long term benefit to both the developed and the underdeveloped country. Technology cannot be transferred by handing the undeveloped country a parcel of specifications and an engineer for three months. The recipient must be in a position to receive and utilize the technology and it must be appropriate to the receiving nation. Technology is dynamic, it is continuously evolving and the transfer involves an ongoing mutually beneficial relationship. The transfer when properly done at the same time brings great and continuing benefit to the host country.

One effective and mutually beneficial method of transferring technology is through joint ventures. My company has spent tens of millions of dollars over the years developing technology in various product lines. We will not "sell" that technology or

any part of it as a package. We believe that maximum benefit is derived for all parties when the transfer is executed through a joint venture. I would also emphasize that the technology transferred should be of the highest standard that the partnership and the investment environment can absorb. It must be recognized that, at an early stage of development, a host country may not have the skills to absorb the highest technology but every effort must be made to introduce a higher level as soon as it can be effectively and economically put into practice.

This suggests that it is critical to the joint venture that the Canadian investor who is supplying the technology maintains a research and development program that continues to produce world competitive products and processes. In this way, no incentive is given to the partner to look elsewhere for technical assistance.

Technology transfer involves the negotiation of a Technical Service Agreement, and this should be such that it is fair to both parties. Where applicable, my Company establishes an upper limit on the amount of the technical fee that is usually based on sales volume so that there is a limit to the amount a joint venture would have to pay in any one year.

The Canadian investor must be prepared to assure adequate and competent staff to effect the transfer of the technology. Where applicable, assistance and encouragement should be given to the joint venture in the establishment of research and development facilities in the host country.

Some words of caution; assure that your patents are protected in the host country and register your Technical Service Agreement with the host government as soon as possible to assure that the government grants approval both to the royalty rates negotiated and the remission of those rates to Canada.

Above all, during the studies, during your negotiations with your partner and during your discussions with governments communicate as fully, as openly and as frankly as you can. Inadequate communication can lead to misunderstandings and even disastrous consequences.

These remarks are not meant to appear all inclusive. I hope they draw to your attention some of the important elements involved in establishing joint ventures.

While a great deal of time and effort is required to establish and support joint ventures, there are many rewards.

There are opportunities in the Pacific Rim for many more partnerships. We are continuing our studies.

Finding What Clicks or Clunks in Your Firm

Want to know how your company's return on investment and its productivity compare with your competitors? Or what causes the difference and how your position can be improved? Many Canadian companies have found answers to these vital questions through IT&C's. . . .

Interfirm Comparison Program



Too few companies are keeping track of their own productivity performance, nor have they any way of comparing it with similar firms, observes Imre Bernolak, Director, Productivity Improvement Services.

"Most of the information generated by companies is for financial accounting or taxation purposes and it simply hasn't been integrated into effective management information systems."

For this reason, IT&C launched the Canadian Interfirm Comparison Program a few years ago. The program is geared to help Canadian companies analyze their strengths and weaknesses and become more efficient. In turn, industry findings in summary form are made available to help the department develop the most effective industrial strategies.

To date, despite a small staff and limited resources, the very effective program has covered 45 industry sector areas and has given 1,200

"Our original objective," Bernolak said, "was to analyze the relative productivity of participating firms in order to help them diagnose and eliminate their performance weaknesses. We soon realized, however, that to obtain the co-operation of firms, we had to concentrate on the analysis of their profitability — something of direct interest to them and which they readily understood. Productivity measures were then built into the systematic analysis of profitability."

When an industry sector is chosen for an interfirm comparison, companies that make similar products, have comparable sales volume, comparable marketing and technology and regard one another as competitors, are invited to participate on a voluntary and confidential basis. The company then provides the visiting Interfirm officer with its operating statements, balance sheet data and other essential and meaningful information. It's all done on a personal contact basis. No questionnaires are sent out.

"The question arising from time to time is: 'How is our performance compared to other similar firms within our growing industry?' Your excellent report has given us the answer. In addition, the format will help us establish a similar annual performance check using our own data past and present, thus adding value each passing year."

Canadian companies a profitable glimpse into how they are stacking up against their competitors. And all of it is done in the strictest confidence with everyone's interests protected — those of the company and its competitors.

The sectors covered include various types of plastics processors, manufacturers of chemical film and fabric, farm implements, wooden and upholstered furniture, windows and doors, electrical wire and cable, water pumps, and several segments of the clothing and footwear industry. Also included were iron and steel foundries, steel fabricators, mechanical contractors, die casters and computer service organizations.

Useful information varies from industry to industry. In labour-intensive industries more information is needed on labour requirements; in capital-intensive industries, it is important to get details on available and utilized capital.

"The data are adjusted for comparability, then analyzed in relation to each other," Bernolak stated. "A confidential report is then written to the chief executive officer of each firm and the results are discussed in follow-up interviews."

The confidential report to participants reveals a complete set of some 30 integrated ratios for each firm, identifying companies only by a

code and not by name. The firm's strengths and weaknesses are identified in comparison with other firms. No preconceived values are applied; the norms emerge from the comparison itself.

Based on the findings, suggestions are made on where to look for improved returns, with quantitative targets given, appropriate to the firm's own levels of sales, costs and assets. The report also includes patterns of correlation between such variables as profitability, productivity, sales, promotion and selling expense.

"The most important part of the report is the detailed analysis of company performance," explained Bernolak. **"Comparison is made with the median group results and the top performers, and the company is ranked with respect to key ratios. The analysis emphasizes areas where the most significant differences are observed and concrete suggestions given concerning those operations which could receive special attention or be modified. A careful interpretation of each ratio is given, taking into account the special characteristics of the firm concerned."**

Every effort is made to present the results in the most practical way for management use. **"This is why, for instance, percentage differences are sometimes translated into actual dollar values and the effect is shown on the primary ratios of a given change in a particular area of costs."**

For example, Firm E may find that its return on assets is only average for the industry, but discover that the main reason is unusually high manufacturing overhead costs. This might be due to high maintenance, repairs and energy costs, suggesting that better cost control might be needed in that department. It could be pointed out that if manufacturing overhead costs were reduced by \$60,000 a year to median level, it would result in an improvement in Firm E's return on assets, which would in turn rank them second highest in the comparison.

Another company, Firm D, might find its return on investment low, despite having a high labour productivity and a good gross profit. The cause might be a high marketing and selling expense and high administration expense. This would point out the need to evaluate the effectiveness of the sales force and to question the necessity of having a large head office organization. By cutting both down to median level, Firm D could reduce prices, become more competitive, increase sales as well as profits and have the highest return on assets in the comparison.

"We have found the report to be one of the most useful reports issued by the government. We believe that this confidence in the report probably emanates from the professional manner in which the data was developed."

Follow-up interviews with the chief executive officer of each firm have proved to be a most valuable and popular feature of the program. It gives Interfirm a chance to explain any matters that may be unclear or uncertain in the report and to point out the value of the diagnostic ratio technique as a tool for planning improved performance.

"The mere fact that there is a follow-up meeting seems to stimulate corrective action," avers Bernolak. **"Typically the executive calls in some of the key staff to take part in the discussion sparking a lively and productive session on the area which merits the most attention."**

Gérald Rivest, Chief of the Interfirm Comparison Division of the Productivity Improvement Service, points out that the effectiveness of the program is reflected in the favourable comments of company executives who are in turn surprised, shocked or delighted with the results.

Said one executive: **"After having satisfied ourselves that the comparison is indeed made on a similar basis for all participants, we are somewhat shocked with some of the results suggesting the exist-**

tence of specific weaknesses in our organization which no doubt contributed to our very poor results for the past year."

Extolled another: **"It would seem that by comparison with other companies, ours is doing a remarkably good job. This gives us confidence and encouragement and provides the stimulus for considering ways and means of expanding this operation. We have done very little in the export market but I think we should be pursuing this market vigorously. You have started a whole new train of thought. . ."**

And in the words of another company executive: **"Your understanding and professional competence largely contributed to the success of this study and I am sure I can speak for many when I say the results will be most useful both today and for future planning. I consider this undertaking a model of Government-Industry co-operation and I look forward to participating in future studies of similar nature."**

Productivity variations of 48 to 298 per cent were revealed between competing companies in recent Interfirm comparisons which indicate that there is great potential for productivity improvement in most firms.

Bernolak believes that the program makes a very real contribution to Canadian industry. **"The analysis of productivity that is often lacking is a key step towards better performance. Our interfirm comparison program has proved that productivity analysis can be successfully combined with profitability analysis and that systematic analysis can, indeed, identify very significant performance improvement potentials in most industry sectors."**

Waferboard Industry Doesn't Waffle

A uniquely Canadian industry drew more than 300 delegates to its first symposium held in Ottawa in mid-November. For the consultants, machinery suppliers and manufacturers of waferboard, it was an opportunity to look at the past, assess the present and plan for the future of the industry.

First Canadian Symposium proves Successful

By Bob McDonell



Hand sheets of waferboard are made in the Forintek laboratory using lignin-based adhesives. These new, inexpensive adhesives are made from pulp mill wastes.

Waferboard is manufactured with wafers usually cut from poplar and bound together with water proof adhesives. Widely used in construction, waferboard substitutes for plywood in areas such as roof and wall sheathing, subflooring, interior paneling and exterior cladding.

Invented by an American, Dr. James d'A Clark, waferboard was first successfully produced commercially at a plant in Hudson Bay, Saskatchewan, in the early 1960s. Since that time the product has received significant market acceptance and the seven (soon to be nine) Canadian plants now produce more than 650 million square feet of the product annually (about 90 per cent of world production). Traditionally about 50 per cent of the waferboard produced in Canada has been exported to the United States and some is marketed offshore.

Sponsored by Forintek, the

private corporation set up to take over the development work of the Eastern and Western Forest Products Laboratories of the federal government, the symposium brought together the leaders of the industry for three days of technical sessions and a tour of one of the world's most modern waferboard plants which

was recently opened at LaSarre, Quebec.

Throughout the sessions, the participants discussed the major areas of interest to the waferboard industry — marketing and new uses of the product; supply of raw materials; product performance; process improvements and adhesives.



Marketing

While the traditional markets for waferboard have been in the construction industry as roof decking, sub flooring, and wall sheathing for residential and low rise commercial and industrial buildings, indications are that the product has a significant market as a packing crate and skid material. Its use in furniture manufacturing and laminates for interior and exterior wall applications is also being investigated.

These markets and others in the structural field i.e. framing will increase substantially as

the costs of plywood increase and become more scarce on North American markets. In particular, it was noted that forecasts show a significant rise in home construction in the U.S. and Canada during the later half of the 1980s which, combined with the increased demand for better housing throughout the developing world will provide waferboard consultants and machinery suppliers with excellent markets for their products and expertise. Because of its unique qualities as a reconstituted product waferboard is being investigated for underground foundation work and in areas subject to termite infestations.

Raw Material Supply

Although poplar is the main source of waferboard manufacture, it can be made from a wide selection of trees, both soft and hard, as well as waste products such as sugarcane, and other materials common in the less developed countries of the world. As the industry matures, the experience gained in Canada is being put to use throughout the world providing Canadian consultants with an excellent market for their expertise and opening up foreign markets for Canadian machinery suppliers.

Of particular interest to Canadians, especially in Ontario, is the development of a fast growing hybrid poplar which produces marketable trees in eight years, trees that grow to dinner plate size and up to fifty feet usable trunk in this time frame. There is no doubt that this development will in the future assure a continuing supply of raw wood product to the industry as abandoned farm and logged-over acreages are planted to the improved species. Due to the short harvesting cycle and unique regenerative properties (new growth starts from the cut-over stump), it is now possible to maintain plantations in close proximity to the mills thereby reducing transportation and handling costs.

Product Performance

As a new product, waferboard has not developed the established criteria for strength and service — qualities associated with the more conventional building components such as plywood and lumber sheathing. As a result, it is often confused with particle board when test comparisons are being made. In an effort to clarify these issues, tests which will establish useful guidelines for building code authorities, design engineers and builders are now being carried out by and for the industry. In both the laboratory and in actual field applications, these specifications are now being looked into as the basis for industry-wide standards which will cover not only waferboard but the other building panels such as plywood and particleboard.



DR. M.R. CLARKE, Director of Research, Forintek Canada Corp. (left), discusses forest resource utilization with MR. J.A. BRENNAN, Assistant Deputy Minister, Alberta Forest Service.

Process improvements

In the processing of waferboard, major areas of development include the introduction of machines to increase strength, save labor and fuel costs and develop the potential for production of thick composites which can be substituted for dimensional timber in construction and shipping containers. Research into all these areas is being carried out in Canada. For example, Forintek has developed a steam press which injects live steam into the mat under pressure, greatly increasing the heat transfer into the centre of the board, thereby increasing the rate of cure and promoting plastization of the wood. This results in composites with better dimensional stability. The patent for this press has been licenced to Hawker Siddeley which has produced a prototype at its Vancouver plant prior to entering into full production.

Adhesives

Commercial waferboard is usually manufactured with phenol formaldehyde (PF) adhesives, which cure at high temperatures to produce a waterproof bond. Since these adhesives are petroleum derivatives, their cost escalates with the price of oil. Even when relatively low levels of resin are used, it accounts for approximately half the material costs of waferboard. As a result, chemical companies, Forintek and the industry in general, are concentrating their research on the development of inexpensive, alternative adhesives, based on renewable resources.

The most promising of these developments is the use of lignin produced as by-products of the pulping process, both sulphite and kraft. To date the most promising adhesive is lignin derived from the kraft pulping process. Up to 70

per cent of the PF resin used in waferboard production may be replaced with the kraft lignin without diminishing the strength of the product. Commercial plant trials have demonstrated that the board produced with kraft lignin phenol formaldehyde binder has the same properties as similarly produced waferboard using phenolic resins. Savings to the industry using the lignin binder are estimated at \$8 million a year.

The ultimate objective however, is the complete replacement of petroleum based phenol formaldehyde adhesives. A system that offers great potential is lignin derived from spent sulphite liquor, a by-product of the sulphite pulping process. Patents for the further development of this product have been licenced by Forintek to Temfibre of Temiscaming, Quebec. The company, a wholly owned subsidiary of Tembed Limited, has just received an Enterprise Development Program grant from IT&C to assist in the commercial development of the adhesive binder. Plans call for a three million dollar commercial development half of which is covered by the EDP grant, and the construction of a 120-ton-per-day plant to be onstream by 1983 at a cost of some \$15 million.

For further information on the waferboard industry, contact:

A.E.J. Sudbury
Resource Industries Branch
 IT&C (52)
 235 Queen St., Ottawa, Ont.
 K1A 0H5 (613) 992-0068

or for machinery
Omer Poirier
Machinery Branch
 IT&C (47)
 235 Queen St., Ottawa, Ont.
 K1A 0H5 (613) 992-0096

Capacity Utilization in Manufacturing: Measurements and Recent Developments



Measures of capacity utilization represent important economic information which can be helpful to businessmen and economists for a fuller understanding of the position of a firm, industrial sector or the economy generally, relative to its potential production level. Capacity utilization measures show, in a simple ratio, to what extent productive resources are utilized during a certain period of time. The level of capacity utilization can have a bearing on the immediate or longer term level of output, prices, profits and investment. It should be noted, however, that while these measures are very helpful, they must be supplemented by other indicators in order to ensure a meaningful interpretation of the immediate conditions of the economic environment.

What is a capacity output?

In its simplest form, capacity output is the maximum output that can be produced under normal operating conditions during a specified period of time, allowing for maintenance and repair. Note that this potential output assumes certain conditions

with regard to equipment, labour crews, the number of shifts, prices, etc. Variations with respect to these conditions among firms and industries make it difficult to define potential output for purposes of aggregation and comparison.

Direct estimates of capacity output at any given time can be made for some specific types of equipment based on engineering or rated capacity output operating under "normal" conditions and allowing for necessary maintenance and repairs. This capacity output can then be related to actual output achieved in a particular period to yield the rate of capacity utilization. The capacity measure can be revised over time when new equipment is added to, or old withdrawn from, the production process. For certain industries such as steel, where major installations like a blast furnace or rolling equipment govern or dominate most other operations, capacity output is often expressed in terms of this equipment only, and capacity utilization is calculated by comparing the actual output produced to the potential of this one piece of equipment.

Generally speaking, however, it is not possible to measure capacity in a direct manner in all industries and therefore indirect methods have had to be developed. There are three major statistical methods of this kind available: one from Statistics Canada, another from the Bank of Canada, and a third from the Capital Investment Group, Economic Policy and Analysis, IT&C. All three measures provide estimates for broad industry groups only. Both Statistics Canada and the Bank of Canada explicitly link their measures to the rate of capital formation and estimates of the capital stock in each industry.¹

¹ A presentation and discussion of the capacity utilization data published by the Bank of Canada appeared in "Perspectives on Capacity Utilization in Canada," Bank of Canada Review, September 1974 and "Measuring Capacity Utilization: A Technical Note," Bank of Canada Review, May 1980. An explanation of the Statistics Canada method can be found in "Capacity Utilization Rates in Canadian Manufacturing," StatCan Catalogue 31-003.

Industry, Trade and Commerce Method

The Department uses a more indirect approach than the Bank or Statistics Canada. It estimates the rates of capacity utilization by the "trend-through-peaks" method developed by the Wharton School of Finance and Commerce. Capacity output using this method is defined as the peak production level actually achieved in an industry during a business cycle. A straight line interpolation from one peak to the next is assumed to represent capacity output for the intervening period. In the period following the latest capacity



peak, before a new one is reached, the latest capacity line of this kind is extrapolated with the same slope to represent estimated capacity. If actual production turns out to be higher this new peak becomes the new capacity estimate.

Because there is a difference between the cyclical behaviour of output and that of capital investment, the two methods give different measures of capacity utilization. In a recession, the IT&C method does not capture the effect of a declining capital-output ratio, and therefore it

projects a rising trend in capacity output, thus somewhat underestimating an industry's capacity utilization. During an upswing the differences would be smaller but would still occur. One of the advantages of the IT&C-Wharton method is its relative simplicity. In addition, the IT&C-Wharton technique is readily extended to virtually any country provided output measures are available — capital stock measures are not required. The technique is thus a useful one for international comparisons.

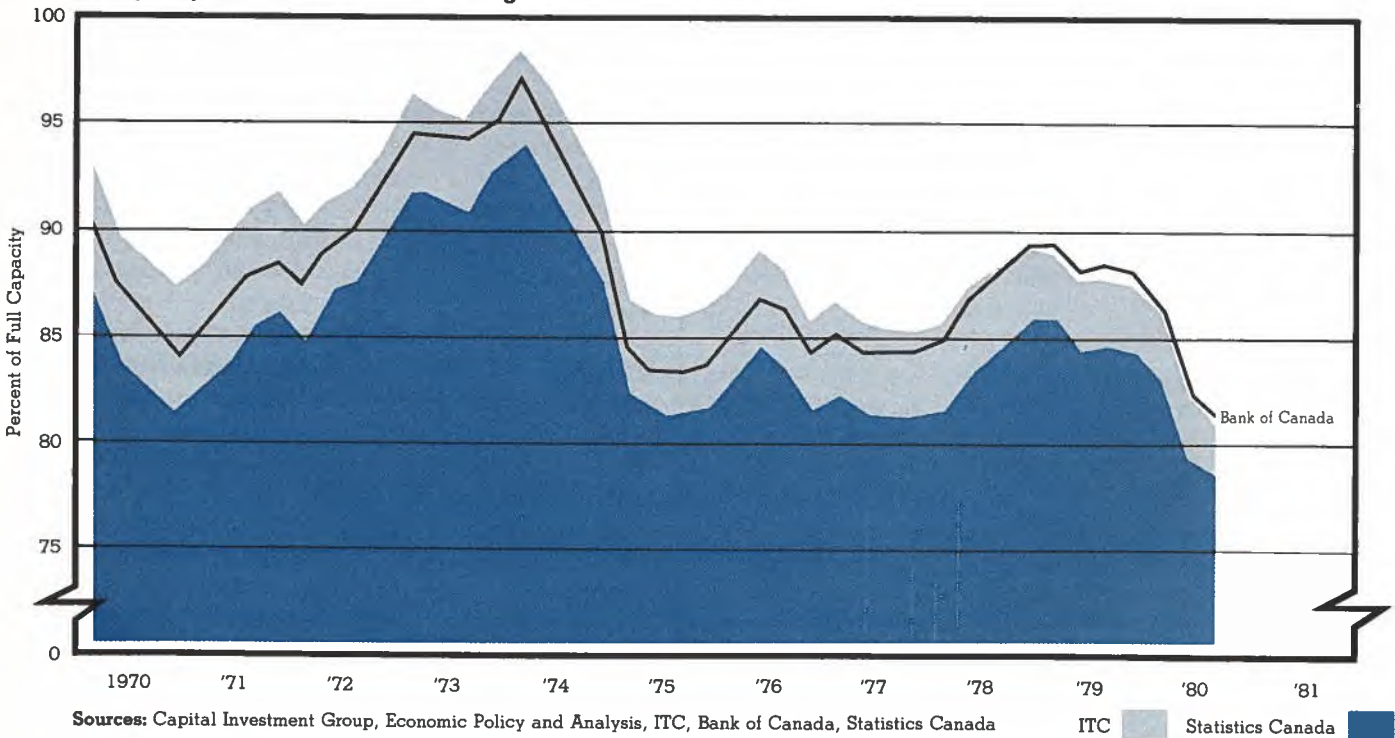
Current Trend

The accompanying chart indicates that over the past decade the three Canadian measures of capacity utilization moved reasonably well together at most points in time. The only exception was the narrowing of the difference between the IT&C and Bank of Canada measures in 1978. In the most recent period, manufacturing capacity utilization peaked around the end of 1978 or the beginning of 1979. This peak, interestingly enough, occurred at considerably lower levels than the previous peak of manufacturing activity in early 1974.

Since the first quarter of 1979 capacity utilization in manufacturing has gradually declined; these declines accelerated with the recessionary levels of output in 1980. Transportation equipment industries contributed heavily to this development as production steadily decreased due to sluggish demand in the United States and Canada.

**Economic Intelligence Branch
Economic Policy and Analysis
Industry, Trade and Commerce
Tel: (613) 995-6480**

Comparison of Canadian Measures of Capacity Utilization in Manufacturing



Canada-France Economic Commission stresses Greater Stimulation of Bilateral Trade Relations



Ministers Gray and Cointat, in the company of their senior civil servants, review Canada-French economic and business papers.

Canada and France are leading world traders. In 1978 France was the world's third largest importer (US \$82 billion) and ranked fourth as an exporter (US \$77 billion). During the same year Canada ranked ninth as a world importer (US \$44 billion) and eighth as an exporter (US \$46 billion). Despite their status as world traders, commercial exchanges between Canada and France amounted to approximately Canadian dollars \$1.4 billion in 1979 — an indication that both countries are only scratching the surface in terms of potential. This situation represented the major challenge facing the Canada-France Economic Commission which met on October 31, 1980. This Commission had been elevated to the Ministerial level in 1974 as both governments wished to provide a greater stimulus to bilateral trade relations.

Commercial Objectives

Principal Canadian objectives vis-à-vis France are:

- to increase the proportion of high technology, labour intensive manufactured goods shipped to France
- to improve access for Canadian products in the French market
- to encourage a transfer of technology in the context of possible French participation in major Canadian procurements or projects

- to increase co-operation between small and medium enterprises in both countries.

The French in turn wish to maintain or improve their access to the Canadian market for various consumer products as they will continue to be principal elements of French exports to Canada in the short and medium term. The possible participation in a few large projects (liquefaction and transportation of natural gas, nuclear ice breaker etc) could also provide an important stimulus to French exports to Canada.

Action Plan

During the Economic Commission, Mr. Gray and his counterpart Mr. Cointat reviewed our bilateral economic relations and identified possible areas for co-operation: e.g. peri-informatic, telecommunications,

videotex, office electronics, industrial robots, oceanology, new energies, agro-food and mining equipment.

It was agreed to exchange specialized missions in these areas with the objective of increasing contacts between businessmen of both countries. During the preparation for these missions, the accent will be put on industrial co-operation between French and Canadian small and medium size enterprises.

Canada has also proposed closer co-operation in the automobile sector, particularly in the context of the purchase by Regie Renault of 46 per cent of American Motors Corporation's shares. Minister Gray held separate meetings with senior officials of Renault and Peugeot while in Paris.

He discussed with them Canada's competitive manufacturing advantages with a view to encouraging them to either buy parts from Canada or establish manufacturing facilities here.

The French Minister indicated again his interest in seeing French participation in a few major Canadian projects or procurements. The Canadian side encouraged the French to compete and Mr. Gray outlined the major objectives of Canada's industrial benefit policy for such projects or procurements. The broad objective of this policy is to maximize the impact of major projects on the Canadian industrial base over the long term. The new technologies brought to Canada would serve not only to satisfy the project at hand but would be applied to other domestic or foreign projects as well.

CANADA-FRANCE TRADE

CANADIAN EXPORTS

1977 - 360.2
1978 - 459.0
1979 - 619.6
8 mos 1980 - 637.0

Main items

Wood pulp
Fish
Lumber
Asbestos
Copper and alloys
Iron or concentrates

Fully manufactured goods as a percentage of exports (1979) - 16.3

CANADIAN IMPORTS

1977 - 522.0
1978 - 682.9
1979 - 777.4
8 mos 1980 - 527.2

Main items

Alcoholic beverages
Motor vehicles & parts
Other transportation equipment
Printed matter
Chemicals & plastics

Fully manufactured goods as a percentage of imports (1979) - 62.1

SOURCE: Statistics Canada

Cost Recoverable Technical Assistance Program Puts Emphasis on Private Sector Involvement



A program that is proving extremely effective in trade promotion has recently been introduced by the Department of Industry, Trade and Commerce.

The Cost Recoverable Technical Assistance Program (CRTA) is designed to improve Canada's performance in marketing Canadian goods and services (including capital projects) abroad. The FOCUS is to maximize Canada's private sector involvement.

Providing government expertise on a cost-recoverable basis, CRTA involves the transfer of Canadian technology to developing countries. The program has two main objectives:

- to increase penetration of foreign markets by Canadian firms;
- to enable developing countries to improve certain sectors of their economies by using Canadian expertise.

One reason for introducing CRTA is that, over the years, various levels of government in Canada have developed a reservoir of expertise that is not always available in the private sector. What the program does is provide this public sector expertise to foreign countries on a government-to-government basis and to Canadian companies — particu-

larly those involved in the export marketing of capital projects.

Potential foreign-country clients are likely to be those with active development programs financed from their own resources. (No firm guidelines are given for the types of technical assistance that can be made available, but generally these would be compatible with Canadian supply capabilities in order to utilize to the fullest the possibility of developing exports of Canadian manufactured goods and services.)

Typical of what the CRTA program can offer foreign countries is the work now in progress on two major projects in Trinidad and Tobago.

The results of CRTA agreements between Canada and this Caribbean republic, Transport Canada and the Canadian Penitentiary Service are assisting Canadian firms in the redevelopment of two airports and the construction of a prison complex.

At the same time, expertise from within these federal government organizations is being transferred — on a continuous basis — to Trinidad's rapidly developing economy.

The second part of the program is designed to DIRECTLY assist Canadian companies when they are bidding on projects abroad. Here the Canadian government provides the help of its experts in an effort to improve the chances of the Canadian company's success.

For example, a firm bidding on a project to set up a nationwide network of agricultural research stations in a foreign country might greatly enhance its chances of success by enlisting the services of a Canadian government agricultural research specialist.

Another feature of CRTA is arranging the TRAINING of personnel from customer countries, providing them with specialized or professional knowledge.

In this instance, the government of a country rich in such natural

resources as forests and fish may wish to send selected personnel for further training by Canadian organizations specializing in these fields. Such an arrangement could lead to increased technical co-operation and commercial exchanges between the two countries.

One important difference between CRTA and other technical assistance programs — with CRTA, the costs incurred by the Canadian Government (and hence the Canadian taxpayer) are always reimbursed by the foreign government or the Canadian firm.

(The Department of Industry, Trade and Commerce administers a central interest-bearing deposit fund into which recipient countries and firms pay in advance agreed amounts to defray the costs of technical assistance provided by government sources known as Action Agencies.)

Action Agencies are Canadian federal and provincial departments and quasi-governmental bodies that supply the expertise required by clients.

At cost, Action Agencies will monitor the contracting and execution of a project on behalf of a foreign government, help a Canadian firm to obtain a contract abroad and, under certain circumstances, train foreign officials or employees of foreign or Canadian firms in specific fields.

While government advice and assistance is available, it should be noted that all commercial contracts between Canadian firms and foreign countries are negotiated and signed by Canadian private-sector organizations.

Further information can be obtained by contacting:

Cost Recoverable Technical Assistance Unit (33/3)

Office of Overseas Projects

The Department of Industry, Trade and Commerce

Ottawa, Ontario, Canada

K1A 0H5

Tel: (613) 995-9092

Getting Off the Ground

You're a young, vigorous company. You know you have a good product line. And you've just moved into 20,000 square feet of new plant and offices. But somehow, although you're ready for takeoff, you can't seem to get off the ground. What do you do?

The Story of How One Company Made It

by Shirley Plowman

All systems were set for "Go" back in 1971 when Tracon Engineering Limited was incorporated. The Waterloo, Ontario, company was in business to design and manufacture custom control systems, dry type transformers and custom metal cabinetry.

But the first several years were struggling ones, taken up with an attempt to identify markets, develop internal control systems and improve manufacturing efficiency.

"Although the company was not financially successful," General Manager Bill Fraser recalled, **"we felt it had great potential if we could only identify the priorities for positive action and implement them in a systematic fashion. We also knew we needed increased working capital and improved equipment."**

With these concerns the company approached the Ontario Ministry of Industry and Tourism in the Kitchener region and also the Toronto office of the federal Department of Industry, Trade and Commerce.

The two levels of government made a professional assessment of the company's situation and it was jointly agreed that Tracon should take advantage of IT&C's Enterprise Development Program to develop a game plan for the company to follow.

"With government guidance and financial assistance, Peat Marwick and Partners were commissioned to provide an in-depth study of the firm's strengths and weaknesses," confided Fraser. **"All aspects of the business were assessed including sales and marketing, manufacturing, engineering and design, financial controls, plant layout and manpower utilization."**

As each facet of the business was minutely scrutinised, major areas of weakness floated to the top and were identified. The strengths of the firm also surfaced and plans were made to guarantee that the positive elements would continue to be reinforced.

"The result of the study was a hundred page report that developed several different paths the company could follow to become more viable in both the short and the long term. IT&C and the provincial ministry gave us a great deal of support and guidance," Fraser said.

Through EDP a greater credit line was established. Much needed new equipment was identified and purchased, the plant layout was improved, management changes were implemented, and control systems introduced in the areas of finance, production, sales and marketing.

"We realized an almost immediate improvement in company performance," Fraser said. **"Within four months of the changes the company turned the corner into the black."**

Much to management's satisfaction, plant efficiency rose measurably, providing for major increases in margins. Results proved to be so dramatic that all budgeting estimates of sales volumes, margins and profitability were easily exceeded.

"This trend continued through the second year after reorganization and allowed the firm to continue to add personnel and equipment in order to provide for continued growth."

The Tracon Engineering Ltd. of 1981 bears little or no resemblance to the struggling firm in 1978. In a two-year period sales have almost tripled and one customer, on whom Tracon relied for 40 per cent of its total business, now consumes only 15 per cent of the firm's total output.

Tracon is now solidly at the forefront of the fast changing technology in the controls industry. A much expanded engineering staff has broadened the firm's capabilities in the areas of design and manufacture of programmable control systems, pneumatic control systems, human engineered operator's consoles and many other facets of industrial control. Applications range from nuclear generating stations in Canada to cement plants in Ecuador, to mines in Trinidad.

Tracon's product range in the transformer field has also been expanded to include larger higher voltage transformers designed and built primarily for the high reliability end of the transformer market. **"At a time when many firms are concerned about cheapening their transformer products to remain competitive,"** Fraser said, **"Tracon's philosophy is to provide the highest possible level of quality through the use of copper wire (not aluminum), conservative design specification and high quality insulations."**

Looking ahead through 1981, the firm anticipates continued growth in spite of a relatively weak economy. A recently completed addition brings the total area of plant and offices to 46,000 square feet operating 18 hours a day and actively pursuing many new opportunities.

"The catalyst for the dramatic change in the company's fortunes was definitely the PEP* study and subsequent EDP assistance," Bill Fraser believes. **"Without the assistance, it's unlikely the firm would have been able to consolidate its position. However, with the guidance and assistance provided by two levels of government, the firm was given a push in the right direction and it's still gaining speed."**

***Program To Enhance Productivity now incorporated under EDP**



Success is in the Bag!

by Don Wight

Having a novel product idea and a presentation that is extremely well researched can help enormously when applying for an Enterprise Development Program (EDP) grant.

That's the view of Ron Langen, President of H.J. Langen & Sons Ltd., a Rexdale, Ontario, company that is Canada's foremost manufacturer of cartoning machines.

"What we did five years ago," says Mr. Langen "was look into new areas of research and development. We zeroed in on the possible development of a check-out stand."

But it was not to be just any ordinary check-out stand. The one which Langen had in mind was unique — it would make its own paper bags!

The company conducted market research studies and analysis over two summers and found there was great potential for a check-out counter that would eliminate the need of bag handling.

"We knew there were approximately 165,000 potential areas in North America for the product we had in mind," says Mr. Langen. "It was a very viable project."

But Mr. Langen also discovered something else.

"The project was too large to undertake on our own, so we approached the Department of Industry, Trade and Commerce with our studies."

One IT&C officer who was really impressed was R.H. Field of the Machinery Branch.

"The application that Langen put together for EDP assistance," says Field, "was an extremely well prepared presentation."

Mr. Field continues. "The company had done a thorough professional market study. This brought the viability of the entire Bag-O-Mat project into perspective and played a strong part in the decision-making process for support of EDP funding."

The result was the granting of an EDP loan and, after five years, the development of the Bag-O-Mat, manufactured through Langen's wholly owned subsidiary Bag-O-Mat Inc. of Mississauga, Ontario.

Aimed at improving the productivity at supermarket check-outs — and currently gaining worldwide acceptance in this field — Bag-O-Mat is modern in design and efficient in concept. It is said, in fact, to surpass any existing check-out counter on the market.

The secret of its success lies in what is not evident at first, or even, second, glance.

In the front compartment are two rolls of paper that have co-adhesive pre-applied bands. The rolls are easily inserted into the compartment, either by the cashier or other store personnel, and, in an average day, can produce 600 bags.

The bags, made at a maximum rate of four per minute, are transported in an inclined and upright position on a cashier-controlled conveyor to the cashier where they are elevated towards her.

The open, elevated and inclined bags are supported from the bottom and three sides during their travel through the five-station loading and customer removal area. Bag handling by the cashier is eliminated.



Langen's Bag-O-Mat system has been under "in-store" test in three Toronto area supermarkets for more than six months. Closely controlled studies during this time have proved a number of points:

- Bag-O-Mat delivers up to 25 per cent more throughput than other check-out counters;
- weight lifted by the cashier is reduced by up to 50 per cent; and
- consistently, 10 per cent more items can be packed per bag.

One of the big plus points with cashiers is that the bag arrives on an angle ready to be filled. At the Hope-dale Mall in Oakville, where Bag-O-Mat is installed, Head Cashier Melody McPhee finds the system faster and, in some cases, easier than conventional checkouts.

"The stand sort of forces you to ring and bag properly and consequently it's faster to process orders," she says. "There's almost no lifting, no cuts from handling bags, and the bags are easier to fill because they come from the machine wide open and don't buckle as you are loading them."

And Store Manager Jim Hunter is brief and to the point. "I'd have 10 if I could."

Mr. Hunter also reports that his store is using half as many new bags as it did plastic ones because the support stand allows each bag to be filled entirely without the bag falling over.

Unique not only in its ability to make and handle bags, the system is also compatible with all currently used mechanical and electronic cash registers — as well as with product code reading scanners and electronic scales!

Both cashiers and customers are enthusiastic about its features and ease of operation. Langen, too, is enthusiastic, currently marketing the Bag-O-Mat on a controlled basis. As well, additional counters are being installed in Canada and distributorships are being arranged in the United States, Britain and Australia.

H.J. Langen & Sons, through its Bag-O-Mat Inc., are now seeking distributorship/partners on a population and use-factor basis worldwide. Potential candidates should, ideally, be experienced as distributors of flexible packaging materials and be willing to perform a simple, local, converting operation — with Langen providing the proven technology.

Enthusiastic, too, is the Enterprise Development Program when it hears from Ron Langen: "Without EDP the project would have taken at least 10 years — by which time the Bag-O-Mat concept would have been obsolete."

For Langen — and for those applying for EDP assistance — success can indeed be in the bag!

Technological Technique Takes Export Market by Storm

In a recent speech to the Quebec Chamber of Commerce, the Minister of State for Small Businesses, Mr. Charles Lapointe, reminded a number of Quebecers of the existence, in their region, of several small high technology businesses which, in some instances, are spreading the reputation of Quebec and Canadian industries for technical expertise to all continents. . . .

One company illustrates this statement particularly well: la Corporation Scientifique Claisse. Claisse is a very small business which has been in operation for only a few years but which, owing to a highly specialized team and an internationally recognized technique, has become a world leader in its field.

The only model of its kind, the Claisse "Fluxer" has carried the company's reputation far and wide. An impressive range of industries and laboratories are proving it to be indispensable.

It all began in 1956 when Laval University professor, Fernand

Claisse, then working for the Quebec Mining Laboratory, perfected the method which now carries his name. Entirely revolutionary at the time and still the world's foremost technique in the field, this method consists in provoking the fusion of a substance for the purpose of subsequent analysis. The resulting uniformity reduces the margin of error to an absolute minimum, whether the analysis is conducted by x-ray or otherwise.

The first Fluxer appeared in 1972. Designed, of course, to use the method of the same name, it reduces the preparatory process to approximately 15 minutes, regardless of the

substance being analyzed: cement, steel, ore, ceramics, geological materials, paint pigments, refractory oven bricks or pollution dust.

The Fluxer transforms the substance for analysis into a solution or a glass disc and can prepare six samples at a time automatically. For glass disc analysis, the samples are fused in small platinum crucibles heated by burners. The Fluxer, which is in constant motion, ensures perfect uniformity. The same principle applies to solution production, except in casting and cooling processes.

Since the ways in which this apparatus may be used have virtually no geographical, industrial or research limits, the list of client industries, universities and laboratories is impressive.

Claisse exports no less than 90 per cent of its production to the United States, France, Scandinavia, the United Kingdom, Austria, Italy, Kuwait, Algeria, South Africa, Kenya, Saudi Arabia, India, Brazil, Argentina, Japan, China, Jamaica and even New Caledonia, in the far reaches of the South Pacific. Of course, Fluxers are also found almost everywhere in Canada.

Domestic and Export Success All in the Turning of the Screw!

Specializing in the manufacture of gypsum screws, Visbec is a small Quebec business located near Montreal. Since its founding in 1975, activity in Canada's construction industry has declined by 50 per cent — a trend which pervades the construction sector throughout North America. Despite this period of recession, Visbec is operating at full capacity, 24 hours a day! Given this situation, wherein lies Visbec's success?

Very probably, it is attributable to two basic factors: A very high quality product and a well-organized approach to marketing.

Currently these two assets enable Visbec to export its products to the United States and Europe, where the construction sector has not suffered the serious decline which has taken

place on this side of the Atlantic. Through a well-established distribution network, the Boucherville firm sells in France, Great Britain, Belgium and the Netherlands and has marketing agents in the Middle East and South Africa. We might also note that the French general contractor who built the huge Olympic village for the recent Olympic Games in Moscow used Visbec screws.

Visbec is extremely active in the Canadian market and sells 70 per cent of its output to all parts of the country from its depots in Montreal, Toronto and Calgary.

As mentioned, one of the keys to Visbec's success is its very high quality products. This is no empty statement even when applied to a field which, at first glance, appears rather dull: the production of screws.

A sample of its clients will provide a good idea of the reputation the Corporation Scientifique

Claisse has made for itself: the Commission de l'Énergie atomique, Grenoble, France; Union Carbide, Tarrytown (N.Y.), USA; U.S. Geological Mission, Saudi Arabia; Laborelec, Belgium; Shell Oil Co., Houston, USA; Abe Trading Co., Osaka, Japan; China National Instruments, Peking, China; Petrobras, Rio de Janeiro, Brazil; Sonatrach, Boumerdes, Algeria. The complete list of prestigious agencies and companies using Claisse products is very impressive and the company may well encounter an even greater demand for its products.

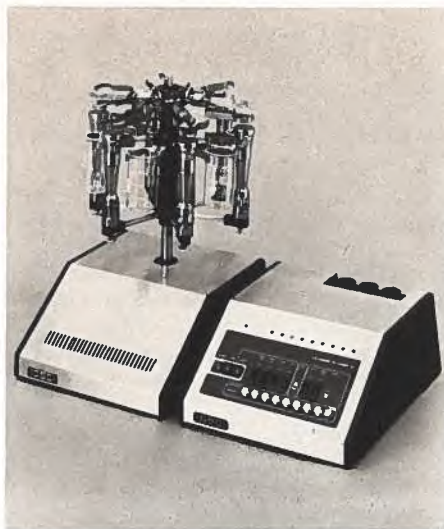
With a vast potential market throughout the world, the Claisse Corporation's sales opportunities are enormous and could involve several thousand such items in the future. This would mean impressive sales in dollar terms for a Canadian company which excels in high technology.

The Claisse Corporation has expressed its desire to export by taking part in several trade fairs abroad: Denver, Cleveland, Atlantic City, Paris and Nice. In some cases,

Not so very long ago, as a result of its products being technologically obsolete, Visbec was losing its markets to Japanese competitors. With the assistance of the Enterprise Development Program (EDP) of the federal Department of Industry, Trade and Commerce, the Quebec firm has now caught up with — and outrun — the competition.

Today Visbec is the only Canadian company to manufacture a gypsum screw which is unique in quality. This is essentially an all-purpose screw which may be used with an electric drill. Visbec is one of the few small Canadian businesses to have a research and development department operating on a regular budget.

Since the company was founded, Visbec executives have concentrated on the firm's other strong



The Claisse "Fluxer" is the only model of its kind in the world. The company exports 90 per cent of production to international markets.

it has done so with the assistance of the federal Department of Industry, Trade and Commerce.

It is important to add that the company follows up its sales by providing information on both the method and apparatus in cases where particular substances are being analyzed. This service enhances the company's already excellent reputation.

Finally, Claisse conducts research

point — marketing — and have never hesitated to go out and meet clients and distributors in Canada, Europe or elsewhere. In some instances, they have taken advantage of assistance offered by the Department of Industry, Trade and Commerce through its Program for Export Market Development (PEMD). An example in point took place in 1976, when PEMD enabled Visbec to enter markets in four countries and make a number of sales.

Background

Visbec's history is rather interesting. Founded in 1975, it conducted business worth \$1.2 million in its first year, a figure which then increased annually by an average of 20 per cent, in spite of the declining construction market. In 1981, the company's business turnover should

and development work on analytical methods.

Claisse excels in the advanced technique it has perfected and exports an extremely high percentage of its output. In short, it falls into that class of businesses which Canada appears to need most at present: the category of small, dynamic, specialized firms exporting finished, original products.

Just before going to print we learned Claisse has made certain modifications to its product, improving its quality, making it more adjustable and malleable so that it can more easily be used in virtually any context.

As well, the company will participate in two exhibitions in Europe, one in London in September '81; the other in West Germany the following year. In Germany it is called **ACHEMA-DECHEMA**, the most prestigious European exhibition of scientific instruments.

This decision is part of the company's attempt to further develop its market areas. Having just gained access to the Australian market, Claisse is now exporting its products on all continents.

reach more than \$2.5 million.

Located in spacious offices in Boucherville's industrial centre, Visbec currently employs a qualified staff of approximately 30 persons.

While, of course, they wish to continue their work in the screw manufacturing sector and are firmly resolved to remain in the technological vanguard of this field, company executives would nevertheless like to diversify their activities and move into entirely different sectors.

For example, although no details may be revealed at the moment, Visbec has patented a product invented by a university research team. The product was tested by the US Navy and is now much sought after by the US Air Force and by European firms in the field of technology.

Trade Fair Round-up Shirley Plowman

Robots Hit of Compec '80

Robots, made by Lanpar Limited, Markham, Ontario, stole the Compec '80 show in London, England, November 4-6, 1980. Not only were the white, red-eared mechanical men great fun to watch, they drew attention to Canadian expertise in the electronics and computer industry. Lanpar believes that in the future, robots may well be used for a variety of hazardous tasks such as cleaning up nuclear waste, defusing bombs and fighting oil fires.

Eleven Canadian companies showcased their computers and computer auxiliary equipment, bringing in on-site sales of \$64,000 with promising follow-on sales of more than \$6 million.

Many companies were enthusiastic about the response to their products.

Reported Telecomputer Integrated Systems Inc.: **"We got credibility and status coming to this show and it brought business which we had not anticipated."**

Dynalogic Corporation believes that a Canadian presence attracted more publicity and visitors to their booth. And another company, IP Sharp, agreed that being Canadian had a special mystique. **"I think going with Canada was extremely useful."**

IT&C Site Project Manager J.A. Quarington said in summation: **"The exhibitors considered the Canadian presentation to be 'very successful' resulting in numerous contacts which could lead to lucrative business with the United Kingdom."**



Two talking robots, Argon and Lani, the brain children of Lanpar Ltd., Markham, Ontario, both awed and amused visitors at Compec '80 in London, England. When a pretty blonde asked Lani if she could take him home, his quick electronic mind whipped up an apt reply, "I'll pick you up at eight p.m.," he said. "You bring the champagne, I'll bring the battery charges."

Munich Hosts Electronics Show

Ten Canadian companies exhibited various electronics equipment at Electronica in Munich, Germany on November 6-12, 1980.

On-site sales came to \$606,000 with an estimated \$14,400,000 expected over the follow-on period. Buyer representatives were mainly from the United Kingdom, Germany, Sweden and Denmark.

Mitel Corporation enthused about the size, service and location of the Canadian stand. **"The prominence of the**

stand gave immeasurable support to individual company efforts and was the envy of other exhibitors. Without IT&C, very few companies could be present."

Matrox Electronic Systems also expressed their appreciation of the Canadian Stand. **"We were very happy with the arrangements. Keep up the good work!"**

Said Fisher Gauge: **"The co-operation of government personnel was excellent. . ."**

A Piece of the Peruvian Pie

In Lima, Peru, on November 18, 1980, Canadian Commercial Counsellor Tom Parrot announced the sales results of the Canadian participation at Tecnomin/Technopan '80. This was Canada Day — just four days into the show, which ran from November 14 to 23, 1980 — and already on-site sales added up to \$2,693,000 with projected sales of \$14,500,000.

All 17 Canadian companies got their fair share of the Lima pie. According to Bill Craig, General Sales Manager, Kennametal Inc., Toronto: **"We confirmed a lucrative mining equipment market in Peru. The acceptance of Canadian products was a pleasant surprise and we expect to build up a firm long-term business arrangement here."**

Dave Pal, Vice-President, Teledyne (Canada) Mining Products, Thornbury, Ontario, said he was very pleased with the early results. **"The timing of this venture into the Peruvian market was excellent."**

Bernard de Langavant, Frigex Inc., Montreal, was happy to discover that his company's ice making plant was ideally suited to the needs of the Peruvian fishing industry. And John Carrigan, General Manager, Lochhead-Haggerty in New Westminster, found that his company's products were competitive in quality and more than competitive in price with any offered in that market. **"There is quite a bit of potential business in Peru."**

Lima's exhibition grounds, a veritable horticultural paradise with its breathtakingly beautiful flowers, made an ideal setting for the red and white Canadian pavillion. Peruvian President Fernando Belaunde toured the pavillion along with Prime Minister Manuel Ulloa and several of his cabinet ministers.

An evening reception was held in the Canadian pavillion where more than 600 guests, including Peruvian Minister of Fisheries Rene Deustua viewed working demonstrations of products such as ice making and fish scaling machines. Guests also saw a variety of mining equipment and had a chance to discuss business with the 28-man contingent of Canadian businessmen.

A special display hallmarked the catalogues of a further 24 companies, making the Canadian presentation the second largest at the exhibition.

Enthused Paul Shutte, Chief, Western Hemisphere and Pacific Division: **"For these few days we seem to have again found that magical feeling that we had at Expo '67 when everything fell into place. I feel privileged and proud to have witnessed a truly remarkable event."**

Multilateral Project Opportunities

The following list of Multilateral Project Opportunities has been prepared by the Office of Overseas Projects (OPS) to inform Canadian companies of the projects being considered or already approved for financing by the international financing institutions such as the World Bank and UNDP. It is important to note that further information is available on approved projects only and may be obtained from the respective geographical division of OPS listed below.

In order to capitalize on these export opportunities, experience has shown that getting in on the ground floor by advance marketing activities or use of local agents has increased the probability of success. Small to medium companies may wish to consider participating as a sub-supplier or as part of a consortium bidding on equipment packages.

Projects under consideration

AFRICA AND MIDDLE EAST (613) 995-7752

CYPRUS

Contact: R. Beare
Southern Conveyor Water Resources Development
World Bank (IBRD) — Amount to be determined

DJIBOUTI

Contact: D. Cooper
Road maintenance
World Bank (IDA) — \$6.0 M (approx)

GAMBIA

Contact: P.A. Rolland
Energy Master Plan & Exploration Promotion
World Bank (IDA) — \$1.0 M

GHANA

Contact: S. Reid
Public Administration Technical Assistance
World Bank (IDA) — \$5.0 M

KENYA

Contact: S. Reid
Grain Marketing and Storage
World Bank (IDA) — \$55.0 M

MAURITANIA

Contact: P.A. Rolland
Education II
World Bank (IDA) — \$5.0 M

MOROCCO

Contact: R. Beare
Shale Oil Engineering
World Bank (IBRD) — Amount to be determined

The Office of Overseas Projects is prepared to assist companies in formulating their bids, and to suggest the appropriate contacts for companies interested in obtaining insurance, bonds and performance guarantees which are often required as part of tender specifications.

In addition, our Trade Commissioners, the Department's personnel abroad, are ready to assist you in pursuing business such as arranging meetings for you with personnel at the executing agencies. The Department of Industry, Trade and Commerce also has liaison officers in Washington and Manila, who are prepared to undertake enquiries on your behalf, however, we recommend that you contact the appropriate officer listed below for your initial enquiry.

NIGERIA

Contact: S. Reid
Technical Assistance for Agricultural Development area program
World Bank (IBRD) — \$46.3 M

SENEGAL

Contact: P.A. Rolland
Dome Flore Appraisal Drilling
World Bank (IBRD) — \$5.0 M

TANZANIA

Contact: S. Reid
Tanzania Investment Bank V
World Bank (IDA) — \$20.0 M

UGANDA

Contact: S. Reid
Agriculture (Coffee)
World Bank (IDA) — \$25.0 M

YEMEN, PEOPLE'S DEM REP

Contact: P. Furesz
Wadi Hadramout II
World Bank (IDA) — Amount to be determined
Mukalla Water Supply Engineering
World Bank (IDA) — Amount to be determined

ZAMBIA

Contact: S. Reid
Dairy
World Bank (IDA) — \$7.0 M (approx)

ASIA/PACIFIC (613) 996-8661

BANGLADESH

Contact: Mary Vandenhoff
Rural Electrification
World Bank (IDA) — \$45.0 M (approx)
Public Administration Training Complex
World Bank (IDA) — \$30.0 M (approx)

BURMA

Contact: Mary Vandenhoff
Upgrading of Hospitals
Asian Development Bank (AsDB) — \$12.0 M
No decision made whether consultants will be required

FIJI

Contact: M. Vandenhoff
Cyclone Reconstruction Project for Roads and drainage works
World Bank (IBRD) — \$17.0 M
Third Power
Asian Development Bank (AsDB) — \$10.0 M
Previously engaged consultants expected to continue

INDIA

Contact: Mary Vandenhoff
Karnataka Tanks
World Bank (IDA) — \$40.0 M
Petrochemicals
World Bank (IDA) — \$300.0 M
Mahanadi and Birupa Barrages
World Bank (IDA) — \$83.0 M
Kallada Irrigation
World Bank (IDA) — \$150.0 M

INDONESIA

Contact: J. Brenchley
Medan Urban Development
Asian Development Bank (AsDB) — \$34.0 M
No decision made whether consultants will be required

KOREA

Contact: J. MacLeod
Ports III and Cement and Coal distribution
World Bank (IBRD) — \$200.0 M
Second Low-Cost Urban Housing
Asian Development Bank (AsDB) — \$50.0 M
No decision made whether consultants will be required

LAO, PEOPLE'S DEM REP

Contact: J. MacLeod
Forestry project
World Bank (IDA) — Amount to be determined

MALAYSIA

Contact: J. Brenchley
Second Trengganu Township Development
Asian Development Bank (AsDB) — \$20.0 M
No decision made whether consultants will be required

MALDIVES

Contact: M. Vandenhoff
Second Fisheries
World Bank (IDA) — \$6.0 M

NEPAL

Crop Intensification Program
Asian Development Bank (AsDB) — Amount to be determined
Consultants will be required.
Feeder Roads (Technical Assistance)
Asian Development Bank (AsDB) — Amount to be determined
Consultants will be recruited by the Bank

PAKISTAN

Left Bank Outfall Drain (Phase I)
World Bank (IDA) — \$30.0 M
Railways XI
World Bank (IDA) — \$30.0 M
Structural Adjustment Credit
World Bank (IDA) — \$75.0 M
Rural Electrification
Asian Development Bank (AsDB) — Amount to be determined
No decision made whether consultants will be required
Pirkoh Gas Development
Asian Development Bank (AsDB) — Amount to be determined
No decision made whether consultants will be required
Technical Assistance Cotton Intensification
Asian Development Bank (AsDB) — Amount to be determined
Consultants will be recruited by the Bank

PAPUA NEW GUINEA

Contact: M. Vandenhoff
Technical Education
Asian Development Bank (AsDB) — Amount to be determined
No decision made whether consultants will be required
Kaugel Hydropower
Asian Development Bank (AsDB) — \$11.0 M (approx)
Consultants financed by bilateral aid in field

SRI LANKA

Contact: Mary Vandenhoff
Second Tree Crops Rehabilitation (Tea)
World Bank (IDA) — \$30.0 M (approx)
Second Tree Crops (Tea) Diversification
World Bank (IDA) — \$10.0 M (approx)
Forestry
World Bank (IDA) — \$15.0 M (approx)

Program Loan for Graphite Industry
Asian Development Bank (AsDB) — \$3.0 M
No consultants will be required
Integrated Coconut Development
Asian Development Bank (AsDB) — Amount to be determined
No decision made whether consultants will be required
Technical Education
Asian Development Bank (AsDB) — Amount to be determined
No decision made whether consultants will be required
Community Forestry
Asian Development Bank (AsDB) — Amount to be determined
No decision made whether consultants will be required

THAILAND

Contact: J. MacLeod
Songkhla-Phuket Ports
Asian Development Bank (AsDB) — \$50.0 M
No decision made whether consultants will be required
Fifth Industrial Financing Corporation
Asian Development Bank (AsDB) — \$50.0 M
No consultants required
Second Medium-Scale Irrigation Package (Technical Assistance)
Asian Development Bank (AsDB) — Amount to be determined
Consultants will be required

WESTERN HEMISPHERE/EUROPE (613) 996-5357

ARGENTINA

Contact: J.G. Carson
Hydrocarbon Credit
World Bank (IBRD) — \$150.0 M

BOLIVIA

Contact: F. Spoke
Third Credit for Industry and Mining
World Bank (IBRD) — \$10.0 M; (IDA) — \$15.0 M

BRAZIL

Contact: J.G. Carson
Installations for Leao II Coal mine
Inter-American Development Bank (IADB) — \$30.0 M
Electric transmission and distribution in Bahia
Inter-American Development Bank (IADB) — \$80.0 M

CHILE

Contact: F. Spoke
Stage III of rural water supply program
Inter-American Development Bank (IADB) — \$20.0 M

COLOMBIA

Contact: F. Spoke
Phosphate Fertilizer
World Bank (IBRD) — \$50.0 M

Highway Construction & Rehabilitation
World Bank (IBRD) — \$100.0 M (approx)
Global credit for urban development works
Inter-American Development Bank (IADB) — \$24.0 M
Playas hydroelectric
Inter-American Development Bank (IADB) — \$83.4 M
Studies for the utilization of non-conventional resources of energy
Inter-American Development Bank (IADB) — Amount to be determined

COSTA RICA

Contact: F.R. Harris
Construction of the Ventanas — Garita hydroelectric systems and drilling of wells for the production of steam
Inter-American Development Bank (IADB) — \$99.0 M

DOMINICAN REP

Contact: F. Spoke
Rio Blanco Power
World Bank (IBRD) — \$30.0 M

ECUADOR

Contact: F. Spoke
DFC V
World Bank (IBRD) — \$80.0 M (approx)
Fondo Nacional de Preinversion
Inter-American Development Bank (IADB) — \$9.0 M
Sewage and storm drainage system of Guayaquil
Inter-American Development Bank (IADB) — \$0.6 M
Integrated rural development in the Province of Pichincha
Inter-American Development Bank (IADB) — \$31.1 M

GUATEMALA

Contact: F.R. Harris
Credit for Agricultural and handicraft development
Inter-American Development Bank (IADB) — \$26.8 M
Preparation of general highway plan
Inter-American Development Bank (IADB) — \$0.25 M

GUYANA

Contact: F. Spoke
Industrial credit program
Inter-American Development Bank (IADB) — \$5.5 M
Prefeasibility study for deep-water port
Inter-American Development Bank (IADB) — \$0.15 M

HAITI

Contact: F. Spoke
Pilot Forestry
World Bank (IDA) — \$5.0 M (approx)
Emergency loan to cover damages caused by Hurricane Allen
Inter-American Development Bank (IADB) — \$43.0 M

HONDURAS

Contact: F.R. Harris
Stage II of a credit education program
Inter-American Development Bank (IADB) — \$8.0 M

JAMAICA

Contact: F. Spoke
Offshore Seismic Survey
World Bank (IBRD) — \$5.0 M

MEXICO

Contact: J. Pearce
Elota-Piactla Irrigation
Inter-American Development Bank (IADB) — \$146.0 M

NICARAGUA

Contact: F.R. Harris
Expansion of Managua's water supply system
World Bank (IBRD) — Amount to be determined
Line of credit for Agriculture & Industry
World Bank (IBRD) — Amount to be determined
Momotombo Geothermal Plant (Stage II)
World Bank (IBRD) — Amount to be determined
Municipal Upgrading
World Bank (IBRD) — Amount to be determined
Highways
World Bank (IBRD) — Amount to be determined
Education
World Bank (IBRD) — Amount to be determined
Low-Cost Housing Program
World Bank (IBRD) — Amount to be determined
Second stage of global program of credits for agricultural and industry recovery
Inter-American Development Bank (IADB) — \$30.0 M
Credit for craftsmen
Inter-American Development Bank (IADB) — \$0.5 M

PANAMA

Contact: F.R. Harris
Highway Maintenance & Reconstruction
World Bank (IBRD) — \$10.0 M (approx)
Power
World Bank (IBRD) — \$25.0 (approx)
Rural water systems & water & sewage systems
Inter-American Development Bank (IADB) — \$29.7 M
Rural electrification and small hydroelectric plants
Inter-American Development Bank (IADB) — \$29.0 M

PERU

Contact: F. Spoke
Olmos-Corral Quemado Highway
Inter-American Development Bank (IADB) — \$70.0 M

Approved projects

AFRICA / MIDDLE EAST (613) 995-7752

BURUNDI

Contact: P.A. Rolland
Urban Development
World Bank (IDA) — \$15.0 M

EGYPT

Contact: D. Cooper
Energy Project
World Bank (IBRD/IDA) — \$127.0 M

LIBERIA

Contact: S. Reid
Petroleum Exploration Promotion
World Bank (IBRD) — \$5.0 M

OMAN

Contact: B. Evans
Telecommunications
World Bank (IBRD) — \$22.0 M

RWANDA

Contact: P.A. Rolland
Telecommunications
World Bank (IDA) — \$11.5 M

TANZANIA

Contact: S. Reid
Coconut Pilot
World Bank (IDA) — \$6.8 M

YEMEN ARAB REP OF

Contact: P. Furesz
Petroleum Exploration
World Bank (IDA) — \$9.0 M

ASIA / PACIFIC (613) 996-8661

Note:

The procurement is the same for all projects financed by the Asian Development Bank. Each supply contract for equipment or materials costing \$150,000 or more shall be awarded under international competitive bidding and under \$150,000 will be on the basis of international shopping.

BANGLADESH

Contact: Mary Vandenhoff
Education
World Bank (IDA) — \$40.0 M
Agriculture and Industry
World Bank (IDA) — \$65.0 M
Rubber Rehabilitation and Expansion Project
Asian Development Bank (AsDB) — \$20.0 M (SF)
Tubewell Project
Asian Development Bank (AsDB) — \$50.0 M

BURMA

Contact: Mary Vandenhoff
Tin Mining Project
Asian Development Bank (AsDB) — Amount to be determined
(Technical Assistance)
Inland Fisheries Development
Asian Development Bank (AsDB) — \$20.0 M

INDIA

Contact: Mary Vandenhoff
Power
World Bank (IDA/IBRD) — \$250.0 M

INDONESIA

Contact: J. Brenchley
University Development
World Bank (IBRD) — \$45.0 M

KOREA

Contact: J. MacLeod
Samrangjin Pumped Storage Power
Asian Development Bank (AsDB) — \$52.63 M

NEPAL

Contact: Mary Vandenhoff
Irrigation
World Bank (IDA) — \$16.0 M
Agriculture Development
Asian Development Bank (AsDB) — \$11.8 M (SF)
Crop Intensification Program Technical Assistance
Asian Development Bank (AsDB) — Amount to be determined

PAKISTAN

Contact: Mary Vandenhoff
Sind Livestock Development Project
Asian Development Bank (AsDB) — Amount to be determined
(Technical Assistance)
Industry Right Bank Pipeline Gas Compression
Asian Development Bank (AsDB) — \$16.3 M

PAPUA NEW GUINEA

Contact: M. Vandenhoff
Lae Port
Asian Development Bank (AsDB) — \$12.0 M

PHILIPPINES

Contact: J. MacLeod
Structural Adjustment
World Bank (IBRD) — \$200.0 M
Manila Grain Terminal
Asian Development Bank (AsDB) — Amount to be determined
(Technical Assistance)
Second Laguna de Bay Irrigation
Asian Development Bank (AsDB) — \$20.0 M

SRI LANKA

Contact: Mary Vandenhoff
Energy
World Bank (IDA) — \$19.5 M
Third Tea Development
Asian Development Bank (AsDB) — \$12.8 M
Mahaweli Area Roads Development
Asian Development Bank (AsDB) — \$10.0 M

**WESTERN HEMISPHERE / EUROPE
(613) 996-5357****ARGENTINA**

Contact: J.G. Carson
Vocational Training & Technical Education
World Bank (IBRD) — \$58.0 M

CHILE

Contact: F. Spoke
Agricultural Credit Project
World Bank (IBRD) — \$36.0 M

GUYANA

Contact: F. Spoke
Power Development Technical Assistance
World Bank (IBRD) — \$8.0 M

HONDURAS

Contact: F.R. Harris
Eighth Highway
World Bank (IBRD) — \$28.0 M

MEXICO

Contact: J. Pearce
Ocoroni Irrigation
World Bank (IBRD) — \$23.0 M

***Note:**

Companies may also wish to subscribe to the U.N. publication "Development Forum: Business Edition" which is published bi-monthly and contains timely tender notices and advance information from all the major multilateral institutions. This journal, including the World Bank and Inter-American Development Bank Monthly Summaries, is available for U.S. \$250.00 per annum from either the United Nations, Palais des Nations, CH-1211, Geneva 10, Switzerland or United Nations Development Forum, Liaison Unit, E-1035, The World Bank, 1818-H Street, N.W., Washington, D.C. 20433. Companies interested *only* in the World Bank Monthly Summary can obtain them for U.S. \$60.00 per annum from World Bank Monthly Operational Summary of Proposed Projects, Johns Hopkins University Press, Journals Div., 34th & Charles Streets, Baltimore, Maryland 21218 U.S.A.

Companies interested in the Asian Development Bank Operational Information, since it is not included in Development Forum, may obtain it from Operational Information, Information Office, Asian Development Bank, P.O. Box 789, Manila, Philippines for a yearly cost of U.S. \$28.00.

New Regulations by Government of Guatemala concern contractors, consultants, suppliers

New regulations for registration of contractors, consultants and suppliers have been announced by the Government of Guatemala.

A new procurement law adopted by the Guatemalan Congress stipulates that foreign contractors, consultants and suppliers must register with the appropriate government body in order to be entitled to supply goods or services to the Guatemalan public sector.

Specific procedures and requirements have been defined for registration of consultants and contractors but not as yet for suppliers.

All documentation must be submitted in Spanish and this information will have to be updated every calendar year. Although regulations for registration of suppliers have not yet been completed, suppliers will be asked to appoint a local agent. This is mandatory for the public sector only and does not apply to the private sector.

Registration forms and instructions can be obtained from the following offices:

For consulting services: Unidad Central de Proyectos, Edif de Finanzas Publicas, 8 Avenida y 21 Calle, Zona 1 (Centro Civico) Nivel 11, Contact: Lic, Arnoldo Izaguirre Tel: 53-13-88

For construction services: Unidad Sectorial de Planificacion, 15 Calle 11-41, Zona 1, Segundo Nivel, Contact: Ing, Victor Rodriguez/Srita Elubia Salazar, Tel: 86-060

For supplier services: Direccion Tecnica del Presupuesto, Edificio de Finanzas Publicas, 8 Avenida y 21 Calle, Zona 1 (Centro Civico) Nivel 18, Contact: Sr. Manuel Ramos Meza/Sr. Abel Garcia Salas, Tel: 86-000

Testing – 1, 2, 3, – Testing

The Canadian Testing Association has available — free of charge — an 88-page Directory of member firms.

This Directory provides prospective clients with a quick and easy reference to the capabilities and facilities available within the Canadian testing industry and is arranged so that one can easily find a laboratory to perform a specific service. The functions carried out by the listed companies run the gamut from consulting, environmental and engineering services, consumer product testing and quality control to chemical, metallurgical, soil and by-product analyses.

The Canadian Testing Association is a professional association of independent, tax-paying organizations, providing clients with impartial and confidential analyses and opinions.

**For additional information, contact:
The Executive Secretary
Canadian Testing Association**

P.O. Box 13033
Postal Station Kanata
Ottawa, Ontario
K2K 1X3
Tel: (613) 836-3010

Canadian Companies Win \$12,000,000-plus Honduras Contracts

Several Canadian firms, with the help of the Canadian Government, have succeeded in winning contracts worth more than \$12,000,000 for the main sawmill in the Olancho Forestry Development Project in Honduras, C.A.

The technical services were financed by the Inter-American Development Bank. H.A. Simons (International) Ltd. and its affiliate, Reid Collins and Associates, did the pre-feasibility study, design and development plan.

Jaakko Poyry and Associates, a small Canadian subsidiary of a large Finnish engineering firm, has the project management contract. The company subcontracted with Carroll Hatch and Associates Ltd. to do the detailed design, tender specifications and procurement assistance.

EDC (Export Development Corporation) loan financing on competitive terms was a key factor in helping 11 Canadian firms to win contracts. The firms were: **Burnaby Machine & Mill Equipment, Burnaby, B.C.** (chip screens); **Hawker Siddeley Canada Ltd., Canadian Car (Pacific Division), Vancouver, B.C.** (sawmill equipment); **Electrovert Ltd., Montreal, P.Q.** (cable trays); **Salton Fabrication, Surrey, B.C.** (lumber dry kilns); **Elworthy, Burnaby, B.C.** (control panels and consoles); **Brunette Machine Works, New Westminster, B.C.** (sawmill equipment); **Canmillex, West Vancouver, B.C.** (sawmill equipment); **Volcano Inc., St. Hyacinthe, P.Q.** (wood waste boiler); **Norelco Industries, Port Coquitlam, B.C.** (refuse burner); **Canada Wire and Cable, Toronto, Ontario** (copper cables).

You don't have to be big to Export



You don't have to be big to deal with Export Development Corporation... you don't have to sell paper mills or power plants or offshore drilling rigs.

One in seven of the Canadian exporters who used our SHORT TERM GLOBAL INSURANCE last year had exports of less than \$25,000 and three in seven had exports of less than \$100,000. As a matter of fact, we had a customer last year whose total premium for one of our policies was about \$10.

No matter which of our services interests you — EXPORT CREDITS INSURANCE, LONG-TERM EXPORT LOANS, or our other financial services — talk to us. We might be able to be of assistance.

EDC is a Canadian Crown Corporation that provides a wide range of insurance, guarantee and loan services to Canadian exporters and foreign buyers to facilitate and develop export trade.

Hugh Dunn, President, Opsal Steel Ltd., Vancouver, British Columbia, exports his logging and mill equipment internationally with EDC's insurance.



Export Development Corporation

WE'RE IN BUSINESS TO HELP
YOU DO BUSINESS
WORLDWIDE.

Box 655,
Ottawa, Canada
K1P 5T9
Tel: (613) 237-2570
Telex: 053-4136



Clip your business
card to this ad.
For more
information on the Export
Development Corporation

Offices in Toronto, Montreal, Vancouver, Halifax

If undelivered return to:
"Canada Commerce"
Dept. Industry, Trade and Commerce
Ottawa, Canada K1A 0H5

Canada Post / Canada Post / Canada Post
Postes Canada / Postes Canada / Postes Canada
Third class / Troisième classe
K1A 0H5
OTTAWA

**Next Month:
Thailand — Report from Bangkok**



**Tapping the Tourist Trade
Report from Philadelphia**



Government
of Canada

Gouvernement
du Canada

Industry, Trade
and Commerce

Industrie
et Commerce

Canada