

INVESTING IN CANADA

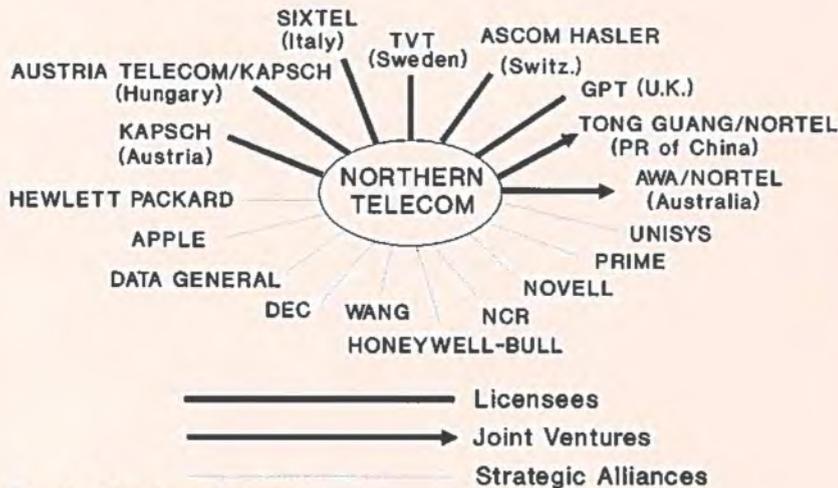
A NEWSLETTER ON CANADA'S INVESTMENT CLIMATE

Vol. 3, No. 4 — Spring 1990



STRATEGIC ALLIANCES

An Illustration of International Networking
and Other Forms of Strategic Alliances



Strategic alliances can be any of a vast array of arrangements that allow companies to leverage their competitive strengths through co-operative efforts. They can include joint ventures, consortia, joint product development, cross licensing, co-promotion, marketing and manufacturing arrangements, or personnel and original equipment manufacturer (OEM) exchanges. Alliances are used to pool ideas and resources, keep pace with market changes, reduce risks, develop new markets, and maintain flexibility.

The following are profiles of three Canadian companies that have entered into strategic alliances to enhance their competitive advantages: Vernacare Corporation, in the area of hospital human waste management; Quadra Logic Technologies Inc., in the development and commercialization of photodynamic drugs; and Cognos Incorporated, in the field of advanced applications and data management software. (p. 4) ▶

Corporate alliances are rapidly becoming an important new strategic option touching every aspect of world industry from small to large companies, from sunrise to sunset industries, and from manufacturing to services. The recent proliferation of alliances is having a profound effect on the structures of industries with significant impacts on the nature of competitive advantage in the 1990s.

Over the course of this decade, a competitive advantage will be based increasingly not only on a firm's internal capabilities but also on its arrangements and the scope of its relationships with other companies. Recognition of this fact is driving leading-edge companies to compete actively for allies, causing many experts to suggest that extended alliance networks will form the industrial base of the next century. (p. 2) ▶

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STRATEGIC ALLIANCES *(Cont'd from p. 1)*

The drive to form strategic alliances is being fueled by a diverse set of pressures. These include the enormously high cost of technology development and commercialization, coupled with the recognition that products costing hundreds of millions of dollars to develop may have life spans of less than two years.

Products are also becoming more complex, incorporating a wider range of technologies. So many different critical technologies are required to develop new products that most companies cannot maintain cutting-edge sophistication in all of them. The intellectual resources necessary to develop completely new generations of products are unlikely to be held by a single company.

Finally, market structures are changing dramatically as exemplified by the further economic integration of the European Economic Community under the Single European Act (1992), the creation of a North American market by the Canada/U.S. Free Trade Agreement, and the liberalization of Eastern Europe, etc. These changes are causing firms to explore rationalization and reconfiguration options and re-examine traditional methods of market penetration and positioning.

Surviving the 1990s

All these factors are causing managers to re-evaluate the requirements of corporate survival and competitive success in the 1990s. In particular, they are being forced to reconsider the "go it alone" strategy which has dominated the thinking of many North American managers. In today's intensely competitive marketplace, few if any firms will have the money, technological scope, or international market pres-

ence to pursue such an approach. While there may still be some managers who adhere to the traditional view that co-operation with others is a sign of weakness, this attitude is not only rapidly losing its currency, it is becoming competitively dangerous.

Firms of all sizes are resorting to strategic alliances to meet the new challenges and opportunities presented by the current global business environment. For large firms, alliances provide a means of sharing costs and risks in the development of expensive, technology-intensive products.

Moreover, large firms are increasingly entering into alliances with small firms to exploit their entrepreneurial capabilities and market niches. For many, alliances are the means to becoming multi-technological.

Today, leading companies such as IBM, Olivetti, Philips and General Electric are at the centre of a dense web of international links. The world automobile industry is becoming criss-crossed with such agreements.

Going International

For small and medium-sized firms, alliances, especially with larger firms, are becoming important sources of finance as venture capital grows more scarce. Moreover, small and mid-sized companies are under greater competitive pressures to become more active players in the global economy, expanding their niches and market leverage. Companies of this size rarely have the financial or managerial resources to build or acquire subsidiaries. For them, alliances are rapidly becoming the preferred route for going international.

Table 1: Major Factors/Circumstances* For Entering into Alliances

BASE (in Canada)	Companies			
	Total	Small	Medium	Large
	333	197	108	28
Market Growth/Increased Sales	115	67	36	12
Partner's Knowledge/Expertise/Reputation	57	37	18	2
Gain Access to U.S. Market/Other Market	57	40	16	1
Potential for Growth/Mandate/Strategy	22	10	9	2
Partner Has R&D Capability/Technology	29	16	7	5
Cost Savings/Required More Financial Resources	47	31	10	6

*Excerpts of most frequently cited categories.
Source: *Directions 89/90 Survey, Ernst & Young*

Table 2: Major Benefits* Derived From Alliances

BASE (in Canada)	Companies			
	Total	Small	Medium	Large
	333	197	108	28
Growth	51	29	19	3
Increased Profits/Decreased Expenses	38	26	10	2
Acquired Knowledge/Tech./Experience/Credibility	65	32	24	9
New/Improved Products (Mfg. by Company)	22	13	6	2
Increased Sales/Market Share	113	69	32	13
Access to Foreign Market	28	17	8	2

*Excerpts of most frequently cited categories.
Source: *Directions 89/90 Survey, Ernst & Young*

Table 3: Major Problems* Resulting From Alliances

BASE (in Canada)	Companies			
	Total	Small	Medium	Large
	333	197	108	28
Expensive	30	23	4	3
Reaching a Formal Agreement/Commitment/Follow Through	20	12	5	3
Conflicting Interests/Differing Objectives	41	21	13	6
Distance	20	14	5	1
Restrictive Int'l Trade Laws/Lack of Market Knowledge	25	13	10	2
None/Few/Minor/Too Early	56	33	17	6

*Excerpts of most frequently cited categories.
Source: *Directions 89/90 Survey, Ernst & Young*

Competitive Pressures

While co-operation between firms in the form of joint ventures and licensing agreements is nothing new, there are some significant qualitative differences between these new arrangements and traditional forms of co-operation. While the latter tended to take place in areas peripheral to a company's core skills, current partnerships are critical to a company's strategic direction and to its achieving future competitive advantage.

Today, companies enter strategic partnerships to leverage critical capabilities, increase the flow of innovation and improve flexibility in responding to market and technological changes. The fundamental objective of these arrangements is to shift the firm's strategic position in the competitive marketplace without a major investment in internal resources.

Directions 89/90 Survey

Recent evidence suggests that many Canadian companies look increasingly to alliances as a way of responding to the competitive pressures discussed above. In the recent Directions 89/90 survey of Canadian advanced technology firms by Ernst & Young, 41% of the 822 respondents indicated that they were involved in a strategic alliance. This included 34% of the small firms in the survey, 56% of the medium-sized firms, and 61% of the large firms. Over 77% of firms surveyed were engaged in foreign partnerships, whereas 42% were involved in domestic partnerships. Fifty-two per cent of the respondents indicated that they would be entering other partnerships in the future. (See accompanying tables.)

For many Canadian companies, strategic alliances will be essential, not only for their growth and development, but also for their survival in the years to

come. It is important to recognize, therefore, that while alliances can confer substantial competitive benefits, they are not without significant challenges and competitive risks.

The Challenges

Working with a partner is a new experience for most companies. Working with a foreign partner can be a real challenge for executives who must master the subtle art of sharing power and information without "giving too much away". Finding personnel able to manage effectively across national boundaries can be a major challenge. Moreover, alliances require unaccustomed clarity with respect to objectives, strategies, policies, relationships and responsibilities of the firms involved.

Numerous recent studies have pointed to disappointments and failed expectations on the part of firms involved in alliances. For the most part, these tend to be the result of unclear objectives, poor partner selection, and inadequate preparation. While alliances may not always live up to expectations, the competitive imperatives are clear, and alliances will likely become an integral element of global industry over the next decade. The challenge will be in learning to form and manage them successfully. Firms that do not learn to use strategic alliances will find themselves at a competitive disadvantage.

— Micheal Kelly, Investment Canada

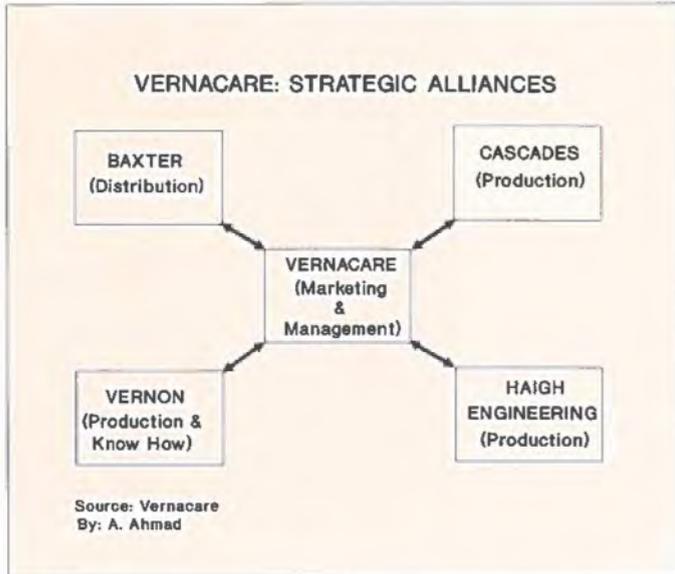
Dr. Micheal Kelly is Director of Investment Promotion for Investment Canada, and Adjunct Research Professor and Lecturer, International Business Strategy, at Carleton University's School of Business.

12 Steps to Success

1. Make sure your goals are clearly defined before searching for a partner. You must know what you need before you look to a partner to satisfy those needs.
2. Be certain at the outset that you are willing to commit the resources that it will take to form and manage a partnership.
3. Get to know your potential partners, their strategies, objectives, operating procedures, and their track records on co-operation well before you consummate a deal. In particular, make certain they are trustworthy and committed to the partnership.
4. Be clear with your potential partners about objectives and obligations, and don't hesitate to deal up front with contentious issues.
5. Be flexible in negotiations, and ready to concede on points you consider to be minor.
6. Strike a flexible deal. Recognize that circumstances and markets change and your deal may have to change too.
7. Take appropriate measures to protect your competitive advantage by, for example, ensuring your technology is patented, etc.
8. Plan your exit up front, and have an agreement with your partner about the termination of the alliance.
9. Pay attention to preparing and gearing up your internal organization for the strategic alliance.
10. Institute performance milestones and a formal review process.
11. Don't overemphasize short-term results. Look at the alliance in terms of your long-term strategic objectives.
12. Above all, remember that the key to alliance success is common sense.

PROFILE: VERNACARE CORPORATION

Hospital Human Waste Management



Vernacare Corporation of Toronto was formed in 1989 to introduce a unique European system of products for handling human wastes in hospitals. Vernacare is a good example of partnering by European and Canadian firms to tap the North American health care market.

Over 25 years ago an English company, Vernon & Company (Pulp Products) Limited, developed a range of paper receptacles such as single-use, disposable bedpans, urinals and wash bowls. Vernon achieved great success in its domestic market — over 65% of all British hospitals were customers — and believed that its products were well-suited for nursing requirements in North America.

The products are environmentally friendly, improve nursing productivity and morale, and are cost effective. Made from recycled telephone books and newspapers, the products undergo a resin treatment which keeps them strong and waterproof, while remaining completely biodegradable. Vernacare's PanAway Disposal Units macerate the used products into pulpy fragments which are then flushed into the sewer system.

To examine its market potential in North America, in mid-1988 Vernon used the services of biomedical consultants provided by Investment Canada to conduct hospital trials, scout for distributors, and initiate the export-import process. In early 1989, Vernacare Corporation was formed as Vernon's Canadian representative in co-marketing waste management products. Together with Baxter Canada, Vernacare imports products from the parent and another English supplier, and sources production in Canada from Cascades Inc.

Vernacare's partnerships in Canada have been instrumental in its success: they have minimized the risks and capital outlay; they have enabled the corporation to move quickly in responding to different needs; and they have helped to ward off new competition.

Within a year of start up, Vernacare has several Canadian hospitals as accounts, has trials at many more, and has targeted another 60 hospitals across Canada. It has since made several adjustments to the original product line to meet North American tastes and standards, has begun to conduct R & D on new products, and is planning to launch into the U.S.

Vernacare's deliberate strategy of entering North America through Canada has also been key: it has permitted more control over growth, more time for product adjustments, and closer management and sensitivity to strategic partnerships and the customer base. In the foreseeable future, Vernacare Corporation will serve the integrated North American health care market with Canadian-made products, a Canadian management team, a Toronto headquarters, and a proud parent in Europe.



*Courtesy of Hogarth-Westmount Hospital,
Thunder Bay, Ontario.*

PROFILE: QUADRA LOGIC TECHNOLOGIES INC.

Photodynamic Technology

Quadra Logic Technologies Inc. (QLT) of Vancouver, B.C. is a world leader in photodynamic technology. The Canadian biopharmaceutical company was formed in 1981 by a group of scientists from the University of British Columbia.

QLT is principally engaged in the development and commercialization of light-activated drugs for the diagnosis and treatment of disease. Photofrin, an experimental drug patented by QLT, is part of a new laser-based treatment technique known as photodynamic therapy.

After injection, Photofrin accumulates in cancer cells; the tumors are then exposed to a low-powered laser beam which causes the drug to become highly toxic to the cancer cells. Photofrin has proven effective in killing tumors without the side effects associated with chemotherapy or radiation, and is expected to revolutionize cancer treatment around the world. This therapy also holds great promise for the treatment of heart disease (unclogging the arteries in arteriosclerosis), various sexually transmitted diseases (venereal warts) and a skin disease known as psoriasis.

In late 1989, QLT signed an agreement with American Cyanamid Company of New Jersey to co-develop and commer-

cialize drugs using photodynamic technology (PDT). This development and distribution agreement was the second alliance between the companies. In addition to the existing rights to QLT's anti-cancer drugs, American Cyanamid was also granted exclusive worldwide marketing and distribution rights for PDT drugs used to treat venereal warts and psoriasis. Under the terms of the agreement, QLT will receive up to US\$8 million payable at various stages of development and will share in the revenue from product sales. Development costs will be shared equally by the two companies, while QLT is responsible for drug manufacturing costs and American Cyanamid for all marketing and distribution costs.

In the International Investment Partnering Seminar held in Montreal in December 1989, QLT President, James Miller, spoke of the learning process undergone by both companies in reaching their 'mutually beneficial operation': "The essential elements for a strategic alliance have been the need for identifying the resource base between the two companies, making sure our goals are in sync, and building a trust."

Tiger Team

Miller outlined an innovative management technique, which he called a 'tiger team', to deal with the very costly and time-consuming process of getting a drug to market. "The tiger team is a very efficient means of interacting and getting down to basics," said Miller. The team is comprised of selected "champions" from both QLT and American Cyanamid in their areas of expertise such as manufacturing, marketing and clinical research. "The tiger team takes things from the clinical development process right through to the marketing process very, very quickly," said Miller. "We've broken many time barriers in clinical/regulatory requirements, taking 18-month processes and reducing them to four or six months."



Photodynamic therapy for malignant brain tumours. (Courtesy of Dr. Paul Muller, Director, Division of Neurosurgery, St. Michael's Hospital, Toronto, Ontario)

On February 12, 1990, QLT and Baxter Healthcare Corporation announced an agreement to develop, manufacture and market systems using PDT drugs to inactivate viruses, bacteria and parasites in human blood. This strategic alliance encompasses the development of a commercial blood treatment program that would give blood banks, hospitals and clinics a new measure of safety when transfusing whole blood or blood products.

Under the terms of the agreement, Baxter and QLT will share equally in all development costs and profits. Costs include the development of systems using QLT's proprietary drugs and Baxter's instrumentation and materials. QLT will be responsible for manufacturing the drug, and Baxter for the manufacturing and worldwide distribution of the systems. Baxter is the world's largest supplier of systems for the collection and processing of blood, and is the major supplier of blood collection packs and related systems used worldwide by the Red Cross.



Courtesy of QLT

PROFILE: COGNOS INCORPORATED

Advanced Application Development and Data Management Software

Cognos Inc., founded in 1969, is a leading developer and marketer of advanced application development and data management software that integrates with major hardware vendor files and data bases. Cognos is Canada's largest independent software manufacturer, and one of the 25 largest in the world. Its 1989 fiscal year sales were approximately C\$108 million, with distribution in close to 70 countries.

Its flagship product, originally a report writer for the Hewlett-Packard 3000 minicomputer, evolved into a complete application development language now called the PowerHouse fourth generation language (4GL). PowerHouse 4GL is the most widely-used product on mid-range computers, with close to 15,000 installations worldwide. Cognos products are used with Hewlett-Packard, Digital Equipment and Data General mid-range computers, as well as with IBM PC/AT compatibles and 386-based systems.

Cognos sells directly through sales offices in 50 locations throughout North America, Europe, Australia and Asia. The company has also developed the PowerHouse Partners Program, through which some 350 independent developers market applications based on Cognos products which are used in a wide variety of industries.

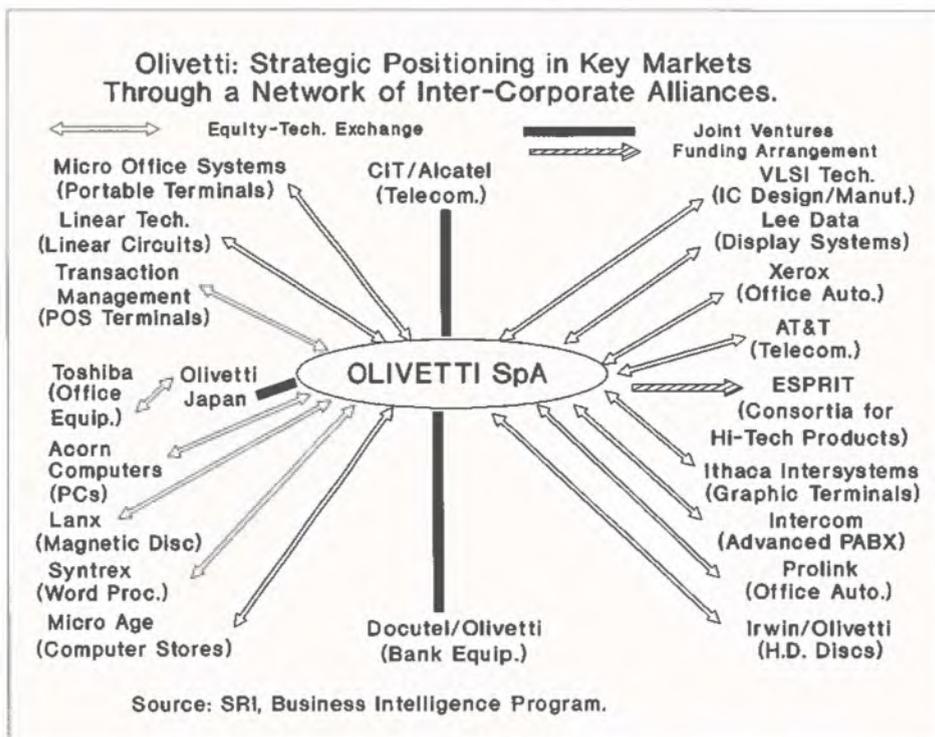
In January 1990, Cognos Inc. and Hewlett-Packard Company (HP) renewed an agreement granting HP a worldwide corporate licence to use PowerHouse 4GL on an unlimited basis for the next two years. This recommended status of PowerHouse means that HP divisions will continue to be encouraged to use PowerHouse 4GL in developing applications.

Hewlett-Packard Company is an international manufacturer of measurement and computation products and systems used in industry, business, education, engineering, science and medicine. HP had revenues of US\$11.9 billion in its 1989 fiscal year, and employs 95,000.

"The renewal of this agreement now makes HP our largest and most important customer worldwide," said Michael Potter, President and CEO of Cognos. "The fact that we began our company on the HP platform makes this relationship that much more gratifying."

Cognos and Digital Equipment Corporation also announced in January 1990, two new worldwide co-operative marketing and distribution agreements, augmented by a comprehensive marketing support program. "The international scope and new levels of co-operative marketing and distribution between Cognos and Digital translate into a strong and unparalleled relationship," said Jeffrey Papows, Senior Vice-President, Worldwide Operations for Cognos.

Under the agreements, Cognos will distribute Digital's relational data base Rdb/VMS, and Digital will resell PowerHouse 4GL. The agreements represent one of Digital's first such worldwide co-operative marketing and distribution programs.



TESTIMONIAL: "WE INVESTED IN CANADA"

ALLIANCE MEDICAL INC. (AMI)

Joint Venture

AMI was created through the partnership of Idee International R&D Inc. of Canada, and Mikromed of Hungary.

Activity of AMI

Worldwide manufacturing and marketing of high-technology medical devices.

Products

Ultrasonic diagnostic equipment for human and animal use.

Size

Anticipated new employees in Canada by the end of 1990: 35.

Markets

Most countries, but mainly Canada and the United States.

Future

To make and market portable ultrasonic, battery-operated diagnostic devices, like the Ultra-Scan. AMI expects to create up to 50 new jobs in 1990-91 and to conduct business of approximately \$5 million.



Left to right: Mr. Karim Ménassa, Vice-President of Idee International R&D Inc., Secretary-Treasurer of AMI; Mr. Stephen Lindmayer, President of Idee International R&D Inc., Secretary—Chairman of the Board, AMI; Mr. William Siebes, Quebec Department of International Affairs, who represented Mr. John Ciaccia at the official opening of AMI; Mr. Bela Badi, President, Mikromed, Budapest, Hungary; Dr. Thomas Kecskemeti, Commercial Director of Mikromed and President of AMI. (Courtesy of AMI)

"We found in Montreal easy access to suppliers, a trained work force, good opportunity to develop new equipment and devices, and access to the entire North American market."

Dr. Thomas Kecskemeti, President, AMI

Alliance Medical Inc., formed in November 1989, is the first Canadian-Hungarian-Soviet joint venture. Established in Montreal, Quebec, AMI will produce devices which promise to revolutionize the veterinary and human medical fields.

The first of these is the Ultra-Scan, the world's first battery-operated ultrasound scanner which was developed in Canada based on a Hungarian patent. This unique, fully portable ultrasound scanner offers to medical practitioners, in both the human and veterinary fields, the opportunity to use this technology in remote areas where electricity may not be available. It is also useful for emergency units, ambulances, medical helicopters, private practitioners and clinics.

Designed to be carried over the shoulder like a camera, the basic model weighs 11 pounds, with batteries that can be

recharged from a car lighter. The Ultra-Scan, to undergo further development, will be manufactured in Montreal and marketed worldwide through existing distribution channels in North America, and in both Eastern and Western Europe.

The joint venture brought together: Idee International R&D Inc., a wholly-owned Canadian research company (well known for the notable achievement in creating a revolutionary needleless injection device to painlessly administer insulin to diabetics) and Mikromed, of Hungary, one of the world's largest producers of medical devices.

Mikromed is part of the Medicor Group established 75 years ago by the German company, Siemens. The Soviet's All Union Institute for Research of Medical Instrumentation, which employs 25,000 scientists and has subsidiaries in all Soviet republics, owns 50% of Mikromed.

Mikromed contributed patents, some equipment, capital and one engineer to the venture, while Idee contributed equity capital, and will manage the company.



The Ultra-Scan (Courtesy of AMI)

DAVOS '90

WORLD
ECONOMIC
FORUM

ANNUAL MEETING
DAVOS 1990

The 1990 World Economic Forum's annual symposium took place in Davos, Switzerland from February 1 to 5. The theme was 'Competition and Co-operation in a Decade of Turbulence'.

The symposium, designed to develop and maintain individual and corporate contacts at the highest levels of business and government, hosted some 600 world leaders from the economic, business and financial sectors.

The Hon. Harvie Andre, then Minister of Industry, Science and Technology Canada, and Minister Responsible for Investment Canada, spoke of the globalization of world markets, and said: "Perhaps no other country in the world is better suited geographically to prosper in an era of globalized markets than Canada".



INVESTMENT CANADA — AT YOUR SERVICE

The Investor Services Group of Investment Canada offers a broad range of services to investors seeking to establish operations in Canada. The Group facilitates the investment process by providing the necessary technical assistance to investors to make their investment decisions a reality. The assistance ranges from supplying general information on how to do business in Canada to finding investment partners—both in Canada and internationally—and facilitating the matchmaking process. The Group also helps to solve problems by initiating discussions between investors and Canadian regulatory bodies to overcome potential roadblocks to the investments.

Investor Services relies heavily on the sectoral expertise of Industry, Science and Technology Canada (ISTC) to answer questions from potential investors regarding industrial sectors. Also, in collaboration with External Affairs and International Trade Canada (EAITC), Investment Canada works closely with investment counsellors stationed in key markets around the world—Tokyo, Hong Kong, The Hague, Paris, London, Bonn, New York and Los Angeles.

The counsellors heighten the visibility of Canadian investment opportunities for joint ventures, strategic partnering, technology transfers, greenfield investments, licensing, etc., and they regularly supply Investor Services with names of foreign companies that have specific investment proposals and are seeking to invest in Canada.

As an example, the Group was able to assist an American-based engineering firm seeking to bid on a number of Canadian capital projects. Investor Services met with the firm's representative and supplied information on Canadian business practices and the regulatory environment. They also discussed market opportunities, and presented the firm with a list of possible Canadian co-venture partners, including one Montreal engineering firm looking for a U.S. partner. If the match is successful, it will generate employment, increase economic activity, and allow the Canadian partner to bid on projects in the United States.

Investment Canada is not in the business of providing funding or subsidies, but it can direct investors to potential sources of capital, and provide advice on

the forms of government assistance available across Canada.

If you have a specific investment opportunity in mind, supported by a business plan, we would like to hear from you. Contact Investor Services, Investment Canada, P.O. Box 2800, Station D, Ottawa, Ontario. K1P 6A5
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Investing in Canada is published quarterly by Investment Canada, the investment development agency of the federal government. The mandate of Investment Canada is to promote investment in Canada by both Canadians and non-Canadians, that contributes to economic growth and employment opportunities, and that is of net benefit to Canada.

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