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Resource Equipment and Technology

Canada's International Business Strategy

1996-1997

Team Canada • Équipe Canada

Canada's International Business Strategy

*is made up of an **Overview** highlighting Canada's international business development priorities, and a series of **Industry Sector Strategies**, which include lists of planned international activities. The following documents are available:*

Overview

1. Advanced Manufacturing Technologies
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3. Agriculture, Food and Beverages
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7. Business, Professional and Educational Services
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18. Oil and Gas Products and Energy Equipment
19. Resource Equipment and Technology
    Agricultural Technology, Machinery and Equipment
    Ocean and Marine Shipboard Technology
20. Space
21. Tourism
22. Urban Transit and Rail Equipment

For information on how to receive the Overview, or additional Industry Sector Strategies, please call: 1-800-267-8376.

All monetary figures in this document are expressed in Canadian dollars unless otherwise indicated.

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British Columbia Ontario Saskatchewan Alberta Quebec New Brunswick Manitoba Nova Scotia Prince Edward Island Newfoundland Yukon Northwest Territories

Note: The forestry, pulp and paper subsector has not been included in the 1996-97 version of *Canada's International Business Strategy* due to resource constraints. It will, however, be reinstated in 1997-98.

This sector comprises manufacturers of tractors, implements and equipment designed for livestock raising, soil preparation, seeding, crop protection, harvesting, handling and storing, and primary processing of a wide range of agricultural crops.

Canadian Position

Western Canada, which is the location of the leading-edge dryland farming equipment technology, represents nearly 50 percent of Canadian production of agricultural machinery. In Western Canada alone (Manitoba, Saskatchewan, Alberta and British Columbia), 183 manufacturers employ over 9500 people and have total sales of $1.4 billion.

The Canadian industry has successfully developed livestock raising equipment and specialized machinery for the production and harvesting of forage crops and cereal grains.

Certain "shortline" firms produce specialized equipment for particular crops (tobacco, potatoes, sugar beets, etc.).

The trend to global markets offers an opportunity to Western Canadian manufacturers of farm machinery, as Canadian dryland farming technology is at the leading edge and is in demand in all the major countries that grow cereal grains under large-scale dryland farming conditions. Canada will continue to be the world-recognized source for large-scale dryland farm machinery and technology in the next decade.

Canada's current dollar exports of farm machinery total approximately $900 million. The United States will continue to be Canada's largest market, but substantial opportunities for growth exist in Australia, Mexico, the European Union (EU), China, Russia, Ukraine and Kazakhstan.

A free-trade environment has existed for 50 years in North America. It has ensured that the Canadian industry has had access to a market large enough to enable Canadian producers to exploit economies of scale where appropriate.

The principal strength of the industry is the low production cost and innovative products resulting from abundant low-cost, high-quality sources of manufacturing inputs (i.e. electricity, skilled workers, transportation and communications infrastructure and steel).

International Environment

The market for farm machinery has become increasingly global as manufacturers strive to reduce costs with large-scale manufacturing to serve worldwide requirements. This trend is exemplified by tractor production, which is largely carried out in three regions of the world (Japan, the EU and North America), each of which specializes in a particular size of tractors sold throughout the world. Tractors with less than 40 horsepower are made in Japan; those with 40 to 100 horsepower are predominantly manufactured in the EU; tractors with over 100 horsepower are made in North America. However, with the increased value of the Japanese yen, there has been a shift to lower horsepower tractor production in North America.

The bulk of farm equipment manufacturing is performed in the United States, the United Kingdom, Germany, France, Japan and Canada.

The world market, which was about $32 billion in 1992, is divided into three roughly equal parts — the EU, North America and the rest of the world. Canada's share of this market is about 5 percent.

The following trends are altering the nature of the global market for farm machinery:

- the shift to increasing production of cereal grains by traditional importers such as Saudi Arabia, the People's Republic of China and India has resulted in these countries becoming net exporters of cereal grains and good markets for farm machinery;
- the privatization of farming in Eastern Europe and the republics of the former Soviet Union (FSU) has opened a major new market for farm machinery producers in the Western world, including Canada. Finding appropriate financing and repayment mechanisms, however, remains a significant challenge;
- the decreasing number of farmers and increasing size of farms in North America has boosted demand for larger, time- and labour-saving equipment;

• the development of regional trading blocs, particularly in the context of Mexico and the North American Free Trade Agreement (NAFTA), coupled with the liberalization of the farm machinery trade, requires a rejuvenated marketing approach to maximize opportunities resulting from standardized regulations and tariff reductions; and

• opportunities exist for joint ventures and alliances in Turkey, India, Pakistan and countries in Africa and the Commonwealth of Independent States (CIS).

Main Challenges

The main challenge is to expand Canada's global position as a leader in the development, production and marketing of tractors, hay and forage equipment and large-scale dryland farming equipment.

Another challenge is to overcome non-tariff barriers, particularly homologation of regulations in the EU.

Strategic Direction

The overall goal of the international strategy is to increase the number of exporting Canadian companies by 30 percent and exports of farm machinery by 22 percent in five years. To achieve this goal, government, with industry, will:

• continue to pursue the United States as Canada's main market, particularly for companies new to international trade (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC]);

• take advantage of the market opportunities for farm machinery in Mexico created by the NAFTA through joint venture marketing and manufacturing initiatives (DFAIT, IC);

• target the CIS (especially Ukraine, Kazakhstan and Russia) and Central and Eastern Europe as a prime development market for Canadian dryland farming technology (DFAIT, IC, industry);

• develop investment and strategic alliances for technology exchange and diffusion to exploit the opportunities presented by the changing market regime of the EU. Specific activities will focus on co-operation in productivity improvement and technology exchanges (IC);

• promote Canadian agricultural mechanization technology to foreign buyers at agricultural equipment trade shows (IC, International Trade Centres [ITCs], provinces);

• focus market development support in China on large-scale grain harvesting, storage and processing equipment in Heilongjiang province (western provinces, western industry);

• maintain market development program for Canadian dryland farming technology in Australia (DFAIT, western provinces);

• continue market development for specialized cereal grain equipment in South America, Saudi Arabia, Iran, Jordan and the Mahgreb countries of North Africa (DFAIT, IC, associations);

• encourage special crop equipment manufacturers (such as potato equipment manufacturers in New Brunswick and Prince Edward Island, tobacco equipment manufacturers in Ontario, and orchard equipment manufacturers in British Columbia and Ontario) to increase marketing initiatives (i.e. individual visits, trade fairs and missions) to targeted regions and countries with sales growth potential (ITCs);

• with the Coalition of Farm Machinery Associations in Canada, develop a matrix of all major product groups, listing individual Canadian manufacturers, and relate these groups to specific world markets for farm machinery (DFAIT, IC, associations);

• establish a team to include the Coalition, IC, DFAIT and the provinces to develop a marketing approach for specific product groupings in foreign markets, addressing such issues as market access, tariffs, non-tariff barriers, financing and trade promotion (DFAIT, IC, provinces, associations); and

• help associations and companies to overcome financing and marketing problems in new markets, particularly in developing countries (ITCs).

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The ocean and marine shipboard technology sector consists of suppliers of low-volume/high-value custom-engineered products and services for use on surface vessels and for applications within the oceans environment.

Canadian Position

Firms in the ocean and marine shipboard technology fields are generally small, Canadian owned, with entrepreneurial and advanced technical capabilities.

Over 200 firms are active in the sector, which generate significant annual sales. There is representation across the country, with clusters of specific activity in British Columbia and Atlantic Canada.

Areas of recognized capabilities include marine communications, electronic charts and navigation systems; hydrographic and oceanographic instrumentation; subsea robotics and remotely operated vehicles, as well as "SmartShip" technology (integrated information subsystems, including navigation, engine monitoring and control, communications); electromagnetic and acoustic remote sensing; cold oceans and ice engineering; geographic information systems for the storage and analysis of marine environmental data; computerized oil-spill prediction models and automated emergency-response planning; and unique designs of surveillance systems, including ground wave over-the-horizon and smart radar systems.

The traditional market in Canada for firms in this sector is in decline. Many companies are suppliers to niche markets; the considerable growth to be realized lies in global markets. International opportunities exist in marine equipment outfitting of commercial ships. The integrated one-stop shopping consortium route to world markets has been adopted as a strategy by a number of companies, with positive results.

Markets emerging from environmental concerns in coastal zones and ownership obligations attached to exclusive economic zones (EEZs) may offer opportunities for a Team Canada[1] or turnkey approach to the industry in Canada. These emerging international markets are large and will require a diverse range of capabilities. Companies should not be averse to collaborating with other Canadian or foreign firms in order to provide the client with an integrated team that focusses on developing a long-term relationship in the host country.

International financial institution (IFI) expenditures are expected to play an important role in these emerging markets. Despite Canada's role as a leading donor to IFIs, Canadian companies have not taken full advantage of associated procurement opportunities. Total lending from these institutions exceeds US$40 billion a year, a significant portion of which could be of interest to Canadian suppliers. Specific areas of Canadian expertise lie in marine communications and navigation systems for ships, applicable in the context of new harbours and ports required in Asia. IFI procurement activity can represent a major source of financing for penetration into developing markets and regions that can otherwise be difficult markets. Since a considerable level of effort would be required on the part of any one firm, it is recommended that companies, especially small and medium-sized enterprises (SMEs), form flexible business networks or similar types of arrangements to share the costs of project identification and bidding.

International Environment

The major competition comes from the United States, France, Germany, Norway, the United Kingdom, Japan and South Korea.

Traditional markets for these supplier firms have been commercial and naval ships, offshore oil and gas operations, and marine science. These markets have experienced declines over the past few years due to various economic factors such as a lack of Canadian shipbuilding, depressed oil prices and East-West detente.

However, a number of new market factors have arisen that are altering the nature of the global market, including:

[1] To serve business more effectively, the Government is pursuing new approaches, based on a Team Canada partnership with the provinces and the private sector, to help Canadian enterprises compete internationally.

• the increased demand for commercial new construction of ships is resulting in an annual multi-billion-dollar opportunity for marine equipment suppliers;

• tighter regulatory regimes are creating new market opportunities for marine environmental technologies. For instance, stiffer environmental regulations brought about by the North American Free Trade Agreement (NAFTA) are creating opportunities within Mexico and Chile;

• United Nations obligations imposed on countries that have laid claim to their offshore regions as EEZs also present opportunities. The diverse needs raised by managing these EEZs should provide both niche and turnkey business opportunities. A large number of EEZs are in the Pacific Ocean, associated with island states such as Micronesia and Melanesia, and with parts of Asia and Australia; and

• IFIs such as the World Bank, Asia Development Bank, and so on, are likely to be important players in the markets emerging from both environmental concerns and the obligations of ownership of EEZs.

Main Challenge

The main challenge of this sector is to enhance the marketing effectiveness of the small niche-oriented firms so that they can cost-effectively market their products and services to the large and diverse projects associated with emerging global trends.

Strategic Direction

The overall goal of the international strategy is to increase the number of Canadian ocean and marine technology companies exporting. To achieve this goal, the Government will work with provincial government departments, industry associations and key groups of SMEs to:

• identify opportunities in the United States, as the sector's primary export market, particularly for first-time exporters (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC]);

• facilitate the development and operation of flexible business networks and other measures for niche-oriented firms to pursue opportunities relating to the creation of EEZs and the environmental attention being focussed on coastal zones in developing countries (IC, Canadian International Development Agency [CIDA], DFAIT);

• develop intelligence on IFI-sponsored projects and target them as a market penetration strategy, especially as they relate to the more difficult markets where conventional financing (i.e. private sector on commercial terms) is not widely available. Also, improve mechanisms for supplier identification and development and for timely dissemination of information and intelligence to potential bidders on such projects through the use of provincial and association databases. (IC, DFAIT, provincial government departments, including Ministère de l'industrie, du commerce, de la science et de la technologie, Quebec, Ministry of Employment and Investment, British Columbia, and Economic Renewal Agency, Nova Scotia, Canadian Maritime Industries Association);

• work with government organizations and industry stakeholders to provide better access to project and export financing by completing the Financing Capability Matrix, and facilitate development of international strategic alliances by providing Canadian companies with detailed profile information on potential partners (IC, DFAIT); and

• pursue opportunities with specific target markets, including the United States, Mexico, Argentina, China, Taiwan and Finland (DFAIT, IC).

References

World Shipbuilding, The Next 10 Years: Can the Challenge Be Met?, Drewry Shipping Consultants Ltd., London, 1992.

"The Marine Technology Industry in Western Canada," Western Economic Diversification, September 1994.

"Changing Markets for Ocean Technologies," Industry Canada, Industrial Technologies Directorate, January 1994.

"The Ocean Technologies Cluster in Newfoundland," joint effort by Industry Canada, St. John's Regional Office, Newfoundland Provincial Department of Industry, Trade and Technology and the Atlantic Canada Opportunities Agency, August 1994.

"Nova Scotia Oceans Initiative," Ad Hoc Committee on the Oceans Sector initiated by the Nova Scotia Council of Applied Science and Technology, activity reports from November 1993 to June 1995.

"The Oceans and Human Future," Dr. Gunnar Kullenberg, Secretary, Intergovernmental Oceanographic Commission, paper presented at Oceanology International '94, March 1994.

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Activity	Date	Location	Dept.	Contact
Africa and the Middle East				
Western Canada Farm Progress Show: Mission from Algeria	19-Jun-96	Regina	DFAIT	613-944-8134
Asia-Pacific South				
Western Canada Farm Progress Show: Mission from Australia	19-Jun-96	Regina	DFAIT	613-995-7652
Central/Eastern Europe and the Commonwealth of Independent States				
Western Canada Farm Progress Show: Mission from Ukraine	19-Jun-96	Regina	DFAIT	613-996-2147
Selkhos '96/Agriculture '96 Ukraine: Info Booth	01-Sep-96	Kiev	DFAIT	613-996-2147
East Asia				
Maritime Patrol Mission from Taiwan	01-Jul-96	Sydney, N.S.	DFAIT	613-995-8744
Navigation Customs Officials' Mission from Taiwan	01-Sep-96	Vancouver/ Sydney, N.S.	DFAIT	613-995-8744
Canadian Marine/Naval Capabilities Seminar	01-Feb-97	Beijing/ Shanghai	DFAIT	613-996-6987
Latin America and the Caribbean				
Marine Technology Mission from Argentina	01-Apr-96	Atlantic Provinces	DFAIT	613-996-5549
Mission from Mexico to Oceans '96 and Halifax	23-Sep-96	Halifax/ Fort Lauderdale	IC	902-426-9905
Desk Top Exhibition	23-Oct-96	Georgetown	DFAIT	613-943-8807
United States				
Western Canada Farm Progress Show: Mission from the U.S.	19-Jun-96	Regina	DFAIT	613-944-2375
Oceans '96: Info Booth	23-Sep-96	Fort Lauderdale	IC	902-426-9905
National Farm Machinery Show 1997: Advertising and Promotion	13-Feb-97	Louisville, KY	DFAIT	613-944-2375

Note: Dates and locations are subject to change.

Activity	Date	Location	Dept.	Contact
Western Europe and the European Union				
Farm Equipment Standards: Mission from Germany	01-Jun-96	Canada TBD	DFAIT	613-992-7001
Western Canada Farm Progress Show: Buyers' Mission from Europe	19-Jun-96	Regina	DFAIT	613-992-7001
Marine Equipment Mission	01-Sep-96	Helsinki	DFAIT	613-992-7001
SIMA (Salon International de la Machine Agricole): Technology Transfer	01-Feb-97	France/U.K./ Germany	IC	613-954-3227

For up-to-date and detailed information on the activities in this document and those contained in other sectors, you may consult the CIBS Compendium. This on-line compilation of activities planned by the federal and provincial governments is continuously revised and is accessible via the Department of Foreign Affairs and International Trade World Wide Web site, at the following address: http://www.dfait-maeci.gc.ca

Acronyms and initialisms used in Canada's International Business Strategy

(This list does not include sector-specific references.)

AAFC	Agricultu
ACOA	Atlantic
APEC	Asia-Pac forum
ASEAN	Associat
BBS	electroni
BOOT	build, ow
BOSS	Business System
CCC	Canadian
CIBS	Canada's Strategy
CIDA	Canadian Agency
CIS	Common
CSA	Canadian
DFAIT	Departm Internati
DFO	Departm
DND	Departm
EC	Environm
EDC	Export D
EU	European
FITT	Forum fo
FORDQ	Federal Office of Regional Development — Quebec
FSU	former Soviet Union
FTA	Canada-U.S. Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNP	gross national product
HRDC	Human Resources Development Canada

	International Business Opportunities Centre
	Industry Canada
	International Development Research Centre
	international financial institution
	International Standards Organization
	International Trade Advisory Committee
	International Trade Centre
	Ministry of Agriculture, Fisheries and Food of Quebec
	multilateral development bank
	multinational enterprise
	North American Free Trade Agreement
	North Atlantic Treaty Organization
	National Research Council
	Natural Resources Canada
	Natural Resources Canada — Canadian Forest Service
	National Sector Team
	Organization for Economic Co-operation and Development
	Program for Export Marketing Development
R&D	research and development
S&T	science and technology
SAGIT	Sectoral Advisory Group on International Trade
SME	small and medium-sized enterprise
UNEP	United Nations Environmental Program
WED	Western Economic Diversification
WTO	World Trade Organization

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Acronyms and ... ernational Business Strat...

(This list does not incl...

AAFC	Agriculture and Agri-Food Canada
ACOA	Atlantic Canada Opportunities Agency
APEC	Asia-Pacific Economic Co-operation forum
ASEAN	Association of Southeast Asian Nations
BBS	electronic bulletin board system
BOOT	build, own/operate, transfer
BOSS	Business Opportunities Sourcing System
CCC	Canadian Commercial Corporation
CIBS	Canada's International Business Strategy
CIDA	Canadian International Development Agency
CIS	Commonwealth of Independent States
CSA	Canadian Standards Association
DFAIT	Department of Foreign Affairs and International Trade
DFO	Department of Fisheries and Oceans
DND	Department of National Defence
EC	Environment Canada
EDC	Export Development Corporation
EU	European Union
FITT	Forum for International Trade Training
FORDQ	Federal Office of Regional Development — Quebec
FSU	former Soviet Union
FTA	Canada-U.S. Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNP	gross national product
HRDC	Human Resources Development Canada
IBOC	International Business Opportunities Centre
IC	Industry Canada
IDRC	International Development Research Centre
IFI	international financial institution
ISO	International Standards Organization
ITAC	International Trade Advisory Committee
ITC	International Trade Centre
MAPAQ	Ministry of Agriculture, Fisheries and Food of Quebec
MDB	multilateral development bank
MNE	multinational enterprise
NAFTA	North American Free Trade Agreement
NATO	North Atlantic Treaty Organization
NRC	National Research Council
NRCan	Natural Resources Canada
NRCan-CFS	Natural Resources Canada — Canadian Forest Service
NST	National Sector Team
OECD	Organization for Economic Co-operation and Development
PEMD	Program for Export Marketing Development
R&D	research and development
S&T	science and technology
SAGIT	Sectoral Advisory Group on International Trade
SME	small and medium-sized enterprise
UNEP	United Nations Environmental Program
WED	Western Economic Diversification
WTO	World Trade Organization

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