QUEEN HF 1479 .157 1996/97 V.8

Chemicals, Plastics and Advanced Materials

8

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
- 2. Aerospace and Defence
- 3. Agriculture, Food and Beverages
- 4. Arts and Cultural Industries
- 5. Automotive
- 6. Bio-Industries
- 7. Business, Professional and Educational Services
- 8. Chemicals, Plastics and Advanced Materials
- 9. Construction Products and Services
- 10. Consumer Products Apparel Textiles Footwear Sporting Goods Pleasure Boats and Equipment Tools, Hardware and Housewares Residential Furniture Business and Institutional Furniture Giftware and Crafts
- 11. Electrical Power Equipment and Services
- 12. Environmental Industry
- 13. Fish and Seafood Products

14. Forest Industries

15. Information Technologies and Telecommunications Overview Telecommunications Equipment and Services Software Products, Computer Services and New Media Geomatics Computers, Peripherals and Instrumentation Electronic Components
16. Medical and Health-care Products

and Services *Medical Devices Pharmaceuticals Health-care Services*

- 17. Metals, Minerals and Related Equipment, Services and Technology
- 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.

©Minister of Supply and Services Canada 1996 Cat. No. C2-226/8-1996E ISBN 0-662-24042-1

Aussi disponible en français sous le titre Produits chimiques, matières, plastiques, matériaux de pointe.

Chemicals

Plastics

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CHEMICALS

hemicals can be divided into two basic categories — commodity and specialty chemicals. Commodity chemicals are traded globally and rely on the supply of competitively priced feedstock and manufacturing economics. Specialty chemicals, on the other hand, are higher value-added products that require greater service and distribution support, and that are more narrowly focussed geographically.

The chemical industry makes more than 70 000 products from a wide range of metals, minerals, crude oil, natural gas, vegetable oils, animal fats and other raw materials. These products include inorganic and organic chemicals, resins, elastomers, fertilizers, crop protection chemicals, fine and specialty chemicals, pharmaceuticals, paints, varnishes, soap and cleaning compounds.

Canadian Position

Based on the value of shipments (\$24.8 billion in 1994, about 7.2 percent of total manufacturing shipments), the chemical sector is Canada's thirdlargest manufacturing sector. There are over 1200 chemical establishments, and in 1994, employment was approximately 90 000 — about 5.4 percent of total manufacturing employment in Canada.

Imports and exports in 1994 totalled \$14.8 billion and \$9.6 billion respectively. Imports represented 49 percent of the domestic market and were composed largely of specialty and formulated chemicals tailored for specific end uses. Exports were primarily commodity products and accounted for 39 percent of factory shipments. Overall, the United States received just over 78 percent of Canada's exports and accounted for 77 percent of Canada's imports. Exports have been aided by increased efficiencies achieved in transportation and handling systems.

During the period 1985-94, imports increased from about 29 percent of the domestic market to about 49 percent. Exports grew from about 24 percent of factory shipments to about 39 percent for the same period. The pattern of increases in both imports and exports reflects increasing globalization of markets.

Multinational enterprises (MNEs) account for about 75 percent of assets and sales of the Canadian chemical industry. Canadian-owned firms, with some notable exceptions, tend to be small and primarily serve regional markets. Canadian producers, particularly smaller specialty chemical manufacturers, are now beginning to take advantage of the opportunities arising from the Canada-U.S. Free Trade Agreement (FTA) and more recently the North American Free Trade Agreement (NAFTA). Many larger MNEs have already rationalized their operations in terms of the larger North American market. This has resulted in the closure of some Canadian branch plants, and in fewer cases, expansion to supply North American markets from Canada. Rationalization of the Canadian chemical industry has resulted in the disappearance of some key technical, marketing and management positions in the Canadian subsidiaries of MNEs.

On the positive side, there are significant tax advantages for carrying out research and development (R&D) activities in Canada. The current 20-percent tax credit available to Canadian companies and the provisions of the Scientific Research and Experimental Development (SRED) Program have established a taxation climate that is more favourable than that in the United States or other major industrial countries. The cost per researcher in Canada, on a common currency basis, is the lowest among the G-7 countries.

International Environment

Chemicals represent a major global industry that accounts for a significant share of foreign direct investment and international trade. Global chemical production in 1993 was estimated at US\$1500 billion. During the past 10 years, world chemical production has increased at an average annual rate of about 6 percent, compared with Canada's rate of 5.5 percent. The U.S. chemical industry is the world's largest, followed by those of Japan, Germany and France. Canada is among the top 20 chemical producers in the world.

Trade in chemicals is fiercely competitive, with producers active on a global scale. Total world exports of chemicals amounted to about US\$325 billion in 1993. Germany was the largest exporter, followed by the United States. Canada accounts for about 2.5 percent of the world's chemical exports.

Having developed significant petrochemical capacity over the past 10 years, Middle Eastern countries are now competing with traditional petrochemical exporting countries: the United States, Canada, Japan and countries in Western Europe. South Korea, Taiwan and more recently China and India are also developing domestic chemical capacity both to satisfy the needs of the growing local markets and to take advantage of export opportunities. The Asia-Pacific region is forecast to be the world's fastest-growing chemical market.

Globalization has resulted in an ongoing restructuring of the industry, particularly within Europe and North America. Markets are also increasingly organized along the lines of the three large trading blocs: North America, the European Union (EU) and the Asia-Pacific region.

Main Challenges

The main challenges facing the chemical industry are to:

- maintain Canada's position as the largest chemical and chemical products exporter to the United States, and increase chemical exports to other countries;
- substantially increase the formulated and specialty chemicals sector's share of the North American market;
- access and utilize strategic information on specific product market opportunities;
- rapidly adopt and commercialize new product and process technologies; and
- promote stewardship initiatives and support efforts for international and federal-provincial harmonization of regulations, and work with

governments to create a more efficient, effective and globally competitive regulatory environment.

Strategic Direction

Consistent with the challenges facing the industry, the federal government will:

- identify and respond to market opportunities through targeted trade initiatives, for example, water treatment chemicals in Latin American and Asian countries (Industry Canada [IC], Department of Foreign Affairs and International Trade [DFAIT]);
- identify and provide strategic market information on specific export opportunities and facilitate company contacts (IC, DFAIT);
- work with industry to develop specific training seminars for initiating and expanding exports to the United States (IC);
- promote industry use of Industry Canada's new 1995 Trading House Directory for Chemicals as a source of obtaining new customers (IC);
- develop sourcing tools (for example, a comprehensive chemical guide) to satisfy sourcing inquiries (IC);
- support subsidiaries of MNEs in developing business cases to win global mandates and investments from their parent organization (IC);
- develop, in partnership with industry, appropriate incoming technology missions to support technology transfer (IC, National Research Council [NRC]);
- promote awareness of the advantages of carrying out R&D and commercial development in Canada (IC, NRC);
- advocate a more competitive regulatory environment through harmonization and mutual recognition agreements (MRAs) with Canada's major trading partners (IC, other government departments); and
- in collaboration with Canadian regulatory departments, develop means (for example, Certificates of Free Sale) of addressing foreign market regulatory issues (IC, Health Canada [HC]).

Contacts

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Department of Foreign Affairs and International Trade Trade Opportunities Division 125 Sussex Drive Ottawa K1A 0G2 Tel: (613) 996-4209 Fax: (613) 943-1103 his strategy addresses the plastics sector, which includes manufacturers of synthetic resins, compounders that blend resins with functional additives,' machinery and mould manufacturers, and processors that make plastic products.

Canadian Position

The profile of the plastics sector is shown in Table 1.

For all subsectors, the United States is the largest export market and also offers the greatest potential for export growth. The focus in the U.S. market is twofold: to increase the number of companies that export, and to increase the market share of those already doing so. Aside from the United States, other priority countries are listed for each subheading.

Resin producers, in approximate order of capacity, are Novacor Chemicals, Dow Chemical, Imperial Oil, Geon, Montell, Petromont, AT Plastics, Du Pont and Eastman Kodak.

The United States is the destination for 80 percent of exports and the source of 90 percent of imports. Canada has a trade deficit of \$600 million in resins; Alberta is the only province with a surplus.

The markets of most interest (aside from the U.S.) are Argentina, China/Hong Kong, Indonesia, Japan, Malaysia, Mexico and Venezuela.

Machinery and moulds are used to form resins into plastic products by a variety of processes, including injection moulding, extrusion, blow moulding and thermoforming. Major firms in this industry are Brampton Engineering, Corma, Engel, Hallmark Tools, Husky Injection Molding Systems, Mold-Masters, and Wentworth Mold and Die Company.

This subsector is highly export-oriented with 70 percent of production being shipped to global markets, and is the only plastics subsector with a trade surplus. Most of the surplus is attributable to moulds, although the machinery component has made strong gains in recent years, moving from a deficit to a surplus position.

Eighty percent of exports go to the United States and 65 percent of imports originate there. Export growth priorities are Argentina, Brazil, Chile, Germany, Italy, Japan and Mexico. South American markets offer particular interest in light of possible expansion of the North American Free Trade Agreement (NAFTA).

Plastic products are used in a broad range of applications, the largest being packaging, construction products and automotive parts.

Table 1 Plastics sector by industry, 1994.					
Industry	Establishments	Employment	Shipments (\$ million)	Imports (\$ million)	Exports (\$ million)
Synthetic resins	90	10 600	4200	2870	2240
Machinery and moulds	400	10 000	1800	680	1250*
Plastic products	1220	65 000	8790	3590	2480

*Beginning in 1994, Canadian export data were collected in a different fashion than previously. This led to an "artificial" jump in exports from \$938 million in 1993. Industry Canada and Statistics Canada are trying to resolve this discontinuity. Historically, this industry has been focussed on domestic markets. However, it is now becoming more export-oriented, and has the potential to make strong gains in foreign markets.

Some of the larger firms in the industry are ABC Group, AT Plastics, Canadian General-Tower, Decoma, Domco, Great Pacific Enterprises, Hamelin

Compounders are intermediaries between resin manufacturers and plastics processors. They are not addressed separately in this document, but for the most part the issues confronting compounders and plastics processors are the same.

Group, Intertape Polymer Group, IPL, IPEX, Kautex, Royal Plastics Group, Twinpak, Winpak and Woodbridge Group.

Approximately 90 percent of export trade and 80 percent of import trade has been with the United States, reflecting the impact that transportation costs have on product movement.

Canada has had a persistent trade deficit in plastic products of about \$1 billion, and is in a deficit position with almost every major country. This is perhaps understandable in cases like China, given that country's ability to produce labour-intensive goods. However, Canada also has significant deficits with the United States, Germany, Japan, and the United Kingdom, where the production cost structure is similar. These deficits underscore the fact that some plastic products can be exported long distances, and that Canadian companies, which tend to be small and medium-sized enterprises (SMEs), need to become more aggressive in both domestic and international markets.

Commodity products have very little export potential beyond North America. For Canadian firms possessing a technological advantage, however, expanding worldwide demand for plastics offers an excellent opportunity for growth. In some instances, direct export is possible, and in others, the main opportunity lies in the export of technology through joint ventures, alliances or acquisitions in foreign markets.

In order to capture an increasing share of these global markets, companies must continue to become more internationally competitive. Competitiveness embodies many elements, including the appropriate use of new technologies, the skill level of the work force, and the condition of the domestic business climate. Industry and governments are discussing ways to address each of these elements.

The following countries offer good potential for growth: Argentina, Australia, China/Hong Kong, France, Germany, Japan, India, Indonesia, Malaysia, Mexico, New Zealand, South Korea, Taiwan, United Kingdom and Uruguay.

International Environment

Resins – Resin producers continue to rationalize globally, becoming more focussed on their core polymer technologies. In some instances companies have swapped product lines, allowing each to consolidate around the strengths of the other. Global alliances are being created to acquire and extend new technology. As an example, many alliances are seeking to apply metallocene technology into a rapidly broadening range of end-use markets.

New resin production capacity continues to come on-stream, particularly along the U.S. Gulf Coast and in Asia-Pacific. Despite its increase of production capacity, Asia-Pacific remains a large net importer of resins, and a region in which Canadian exporters have a strong presence.

Machinery and moulds – As consumption of plastics continues to grow, demand for machinery and moulds increases in tandem. Through corporate consolidation, the major machinery manufacturers are becoming fewer and larger. The principal machinery-producing countries are the United States, Germany, Japan and Italy. Although Canada is not in this category, Canadian companies are world-class and world-scale within specific technology niches. For moulds, Canada is certainly within the top rank of producing and exporting countries.

Plastic products – The movement away from metal, glass and paper as commonly used materials, along with the development of new products, are contributing to a continually increasing demand for plastics. Growth is particularly strong in industrializing nations, where per-capita consumption of plastics is only a fraction of consumption levels in developed countries.

Government responses to environmental issues like solid-waste management and polyvinyl chloride (PVC) must be made in recognition of the impact that they can have on the international competitiveness of all three subsectors.

Main Challenges

For each subsector, the main challenges for industry are summarized below.

Resins

- supporting its domestic customer base of plastics processors;
- continued expansion into export markets;

• winning intra-corporate investment competitions for modernization and expansion in Canada.

Machinery and moulds

• increased export focus on emerging markets, particularly in South America and, in the longer term, Asia-Pacific;

• increased involvement with the Intelligent Manufacturing Systems (IMS) Program.

Plastic products

• increased penetration of U.S. markets where Canadian firms currently supply less than 2 percent of demand;

• export diversification away from North America;

• negotiating joint venture and alliance opportunities in markets for which direct export is not feasible.

Strategic Direction

All subsectors

In almost all countries, demand for plastics is increasing, providing opportunities for Canadian resin, machinery and plastic products producers, yet very few foreign missions regard plastics as a priority sector. Therefore, the Government will pursue the following objectives:

• raise the profile of the sector's capabilities within Canada's international trade network, including Canadian missions abroad and International Trade Centres (Department of Foreign Affairs and International Trade [DFAIT], Ontario, IC);

• assist the newly created International Business Opportunities Centre in improving the database on Canadian plastics companies (DFAIT, IC).

Investment is important from two perspectives: attracting new investment to Canada, and retaining the existing investment base. On both accounts, Canada must provide an attractive investment and regulatory regime, given the aggressive recruiting efforts of other jurisdictions, particularly those in the United States.

Resins

Government actions relating to negotiating improved foreign market access through trade agreements, and assisting in identifying contacts in new export markets are important in meeting the broad objectives of the subsector.

Machinery and moulds

Goal: To increase exports to \$1.5 billion by the year 2000.

The continued vitality of this subsector depends on developing new market opportunities and achieving technological superiority in product niches through research conducted individually and within domestic and international consortia.

To achieve this goal, the Government, in partnership with industry, the Society of the Plastics Industry of Canada (SPI), and other stakeholders, will develop an evergreen five-year trade development strategy focussing on new market opportunities and specific trade initiatives (SPI, DFAIT, IC).

Plastic products

Goal: A 50-percent reduction in Canada's trade deficit by the year 2000.

Companies that are, or become, internationally competitive still need to develop a stronger export orientation. This process will be accelerated by the formation of a trade facilitation group dedicated to plastics, which will offer companies export assistance on a fee-for-service basis (DFAIT, IC).

Another component of competitiveness is having access to the best available information to strengthen strategic planning decisions. The SMEs that characterize much of this sector often do not have ready access to the range of information that is available. Governments play an important role in this regard by providing information of the type and in the form needed by industry. In this regard, the federal government will prepare and disseminate strategic information products, including the following:

• a Sector Competitiveness Framework for the plastics processing industry (IC);

• an electronic database called INSIGHT that provides companies with strategic business information (IC).

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Sector Competitiveness Framework – Plastics Processing, Industry Canada, 1995.

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ADVANCED MATERIALS

A dvanced materials (AM) constitute a spectrum of new materials and processes that enable the design and manufacturing of products with novel and improved properties. The materials can either be used in structural applications as in the construction and automotive sectors, or in functional applications such as in uses exploiting electronic and superconductive properties. Advanced materials include metals, ceramics, polymers and composites of these. These materials have high added value, are at the early stage of the product life cycle, and are enabling for many industries. Advanced processes related to the production and transformation of materials are also included in the sector. A microeconomic review of the AM value-added chain shows that by far the best profit margins are made by fabricators of products using advanced materials, not by the materials or the intermediate product industries.

Canadian Position

• The AM sector is characterized by high growth rates, large potential rewards, and its products are key to boosting the productivity and sales of materials and manufacturing industries. But commercialization of AM is difficult, costly and lengthy. To reduce risks and acquire better insights on markets and technology, the industry resorts to alliances, joint ventures, licensing and networking, and is truly global in its reach.

• There are over 200 Canadian firms identified either as producers of advanced materials or of intermediary components made with advanced materials. The total Canadian production of AM amounted to about \$3 billion in 1995, with employment estimated at 16 000.

• Canadian exports and imports of AM in 1995 are estimated at \$250 million and \$200 million respectively. These estimates do not capture the fact that most advanced materials produced and sold in Canada are ultimately exported in finished products. Canadian aeronautics, transportation and electronic industries are typical users that export finished products.

• Canada does not produce advanced polymers and fibres but has capabilities to transform these into value-added products such as engineering textiles and pre-impregnated weaves used to make composite components.

• Canada is at the leading edge in developing and demonstrating unique uses of advanced composites in bridges and structures. These materials do not corrode, and are used in the construction and rehabilitation of bridges and structures.

• Some 80 companies make up the ceramic segment of the industry, with estimated revenue of \$330 million in 1995. The majority of the firms are small, technology intensive, export-oriented and enjoy high-growth rates. Canadian firms possess unique capabilities in piezoelectric ceramics (sensors, transducers, etc.), optoelectronic applications, refractory materials, new abrasives, high-temperature filters, and cutting tools.

 Advanced metallic materials are mostly represented by large metal processing companies that are increasingly pursuing the development, production and marketing of value-added materials. Alcan, for example, is the world's largest manufacturer of aluminium matrix composites called Duralcan. Other firms such as Inco manufacture nickel-coated fibres and electrodes for high-performance, nickel-based batteries. Noranda possesses capabilities in high-purity metals and Sherritt Inc. has developed unique metallic coating processes and applications. As a major producer of metallic powders and light metals (e.g. aluminum, magnesium), Canada also possesses capabilities and technologies associated with new uses of these materials.

• Among the various advanced materials processes, Canada has capabilities in the field of metallic and ceramic coatings ranging from coatings for resource industries to combat wear, erosion and corrosion, to fire safety coatings, to coatings for aircraft engine parts, to plastics for packaging. The world market for coatings is expected to grow at an average annual rate of over 10 percent from expanded and new uses in the aerospace, machinery, automotive, biomaterials and consumer industries.

• Successful Canadian firms in the AM sector can be categorized as follows:

- Large companies that are better able to develop, produce and market new large-scale materials. Large Canadian metal processors are offering new materials technologies, but these still represent a very limited percentage of revenues.

– Small and medium-sized enterprises (SMEs) that forge strong business partnerships with potential clients and offer unique materials solutions along with design and processing capabilities. Many Canadian firms in the ceramic and polymer composite field have been very successful at forging close business relationships, mostly with U.S. and some European firms. Also in niche materials applications, such as superconductivity, a few Canadian firms are emerging as potentially significant players by virtue of systematic research and development (R&D), production and marketing alliances.

- Firms that operate within an effective network that include potential clients and interactions with foreign stakeholders. Applications and markets for advanced composite materials in bridges and structures are being successfully developed through such networks. The participation of firms in international AM conferences and exhibitions is critical for them to extend their networking access to markets and information.

International Environment

• Advanced materials markets are expanding at about 7 percent a year, with some niche markets growing at well above 10 percent a year. The estimated world market for advanced materials will be \$450 billion by the year 2000, with the U.S. market representing nearly 50 percent of the total.

• Brisk growth continues in the aerospace industry and the transport sectors. Driving forces include pressure from environmental protection groups to design with lightweight and recyclable materials, and fuel efficiency necessitating high-temperature alloys and advanced coatings in turbines. Civilian structural applications such as bridges, seaports and buildings have the potential to substantially boost demand. Japan, Europe and the United States have launched initiatives to demonstrate and validate the use of advanced materials (i.e. fibre-reinforced concrete, polymer-composite reinforcing bars) in these new markets. The driving forces are finding solutions to degradation of structures due to corrosion, and generally lowering the life-cycle cost of structures.

• Overall, polymer composites markets continue to grow at roughly two to three times the rate of the gross domestic product (GDP) in key markets of the United States, Japan and Europe.

• Metal and ceramic matrices are expected to have average annual growth rates of about 20 percent. Their combined value is less than 5 percent of the total forecasted value of advanced composites for 1995.

• The supply of advanced polymers (i.e. hightemperature resins) is expected to grow and become more competitive as key patents expire throughout the 1990s and more Japanese producers enter the business. Traditional suppliers such as Du Pont (the largest), Hoechst and General Electric are also expanding their production capacity in new and existing markets.

• The estimated world market for advanced ceramics in 1995 is \$28 billion, an increase of about 10 percent over the previous year. The world market for all ceramics (glass, refractories, porcelains, etc.) will exceed \$140 billion in 1995. The world's largest suppliers include Philips Electronics (Netherlands), Kyocera (Japan), Murata Manufacturing (Japan), Saint-Gobain (France), and Corning Inc. (United States).

• Markets for superalloys have developed from close working relationships between suppliers and end users. Much of the market information in this area is confidential as the materials are highly specialized and serve niche markets. The largest superalloy producer in the U.S. is Inco Alloys International, Huntington, West Virginia.

• The Eastern bloc countries, while having shown little success in commercializing advanced materials, are potentially a good source of AM technology. Russia is particularly strong in ceramics and materials-coating processes.

Main Challenges

The main challenges for the Canadian advanced materials industry within the context of an international business strategy include:

• increasing market intelligence, particularly on large user markets in industrialized countries. Strategic information is required on new applications and markets using polymer composite materials, light metals and ceramics, and on potential partners to complement technology, production and marketing capabilities;

• expanding systematic and focussed networking venues with potential foreign customers, partners and technology providers. This is particularly important for SMEs that do not have a global presence but rely on such venues to develop new business opportunities;

• increasing intelligence gathering on emerging AM technologies, and disseminating information on how to access these technologies. The growth and competitiveness of the AM industry is dependent on developing, adopting and adapting leading-edge technology;

• improving access of SMEs to international marketing and trade venues in Canada and abroad;

• establishing international standards (materials properties, and method and procedures for measuring properties) for ceramics, and the use of advanced composites in bridges and structures to avoid market barriers and help prepare industry to meet global standards; and

• promoting Canada as an attractive investment destination to potential foreign AM investors.

Strategic Direction

• Showcase the capabilities and partnership potential of Canadian advanced materials firms through information products available at international events, and from government trade representatives, and the newly created International Business Opportunities Centre. The objective is to gain the broadest possible exposure of advanced materials firms in international forums.

• Improve access for SMEs to key foreign markets through participation at selected events such as U.S., European and Asian trade fairs by sponsoring booths and arranging for networking between firms and academic and institutional R&D centres. • Broaden opportunities for technology transfer, market intelligence and trade between Canadian firms, academic research centres and their foreign counterparts through sponsorship of international workshops, conferences and trade shows in Canada.

• Seek enhanced investments and R&D activities in Canada from multinational AM companies, particularly in areas where there are no domestic capabilities to improve trade but also materials sourcing and technology opportunities for Canadian firms.

• Further Canadian interests in the development of international standards for ceramics (ISO/TC206) and of codes and standards in bridges and structures (through the Advanced Composites Materials in Bridges and Structures Network) by supporting the creation of multistakeholder committees.

• Increase Canada's access to untapped sources of research in Central and Eastern Europe, and encourage networking with research institutes in those countries.

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CHEMICALS, PLASTICS AND ADVANCED MATERIALS

Activity	Date	Location	Dept.	Contact
The Color AND FLATE VALLEYA				ATTO 2019 2019 2019
Asia-Pacific South				
Plastics Market Study	01-Apr-96	Australia/ New Zealand	IC	613-954-3016
East Asia				
Plastics Market Summaries	01-Apr-96	China/Hong Kong/ Taiwan/India	IC	613-954-3016
Plastics/Packaging Mission	01-Sep-96	Hong Kong/ Guangzhou	DFAIT	613-996-6987
Latin America and the Caribbean				
Plastics Market Studies	01-Apr-96	Argentina/Brazil/ Chile	IC	613-954-3016
Canadian Solo Trade Show: Mission	03-Dec-96	Santiago	DFAIT	613-996-5358
Mission in Conjunction with Solo Trade Show	27-Nov-96	Santiago	IC	613-954-3427
Multiple Markets				
Plastics Capability Guide	01-Apr-96	Canada TBD	IC	613-954-3016
Expoplast '96: Incoming Visitors	01-Oct-96	Montreal	IC	613-954-3016
Western Furane and the European Union				
Scandinavia Plastics Market Study	01-Apr-96	Stockholm	ÍC.	613-943-2153
Europlastica/Eurotech: Info Booth	01-May-96	Brussels	DFAIT	613-996-1530
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Note: Dates and locations are subject to change.

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 QUEEN HF 1479 .157 1996/97 V. 8

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Acronyms and initialisms used in Canada's International Business Strate

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

	DATE DE RETOUR		
AAFC	Agricultu		International Business Opportunities
ACOA	Atlantic		Centre
APEC	Asia-Pac		—Industry Canada
	forum	· · · · · · · · · · · · · · · · · · ·	International Development Research
ASEAN	Associati		
BBS	electroni		
BOOT	build, ow		International Standards Organization
BOSS	Business System		International Trade Advisory ——Committee
CCC	Canadiar		International Trade Centre
CIBS	Canada's		Ministry of Agriculture, Fisheries and Food of Quebec
CIDA	Canadiar		multilateral development bank
	Agency		multinational enterprise
CIS	Common		North American Free Trade Agreement
CSA	Canadiar		North Atlantic Treaty Organization
DFAIT	Departm	1. M. H.	National Research Council
	Internatio		Natural Resources Canada
DFO	Departm		Natural Resources Canada —
DND	Departm		Canadian Forest Service
EC	Environm		National Sector Team
EDC	Export D		Organization for Economic
EU	Europear CARR MSLEAN	38-2	Co-operation and Development
FITT	Forum fo		Program for Export Marketing
FORDQ	Federal Office of Regional	DeD	- Development
	Development — Quebec	R&D	research and development
FSU	former Soviet Union	S&T	science and technology
FTA	Canada-U.S. Free Trade Agreement	SAGIT	Sectoral Advisory Group on International Trade
GATT	General Agreement on Tariffs and Trade	SME	small and medium-sized enterprise
GDP	gross domestic product	SME	United Nations Environmental Program
GNP	gross national product	UNEP	Wastern Faonomic Diversification
HRDC	Human Resources Development Canada	WED	World Trade Organization

DATE DE RETOUR







Acronyms and Business Strate

(This list does not inclu

AAFC	Agriculture and Agri-Food Canada	IBOC	International Business Opportunities
ACOA	Atlantic Canada Opportunities Agency		Centre
APEC	Asia-Pacific Economic Co-operation	IC	Industry Canada
	forum	IDRC	International Development Research
ASEAN	Association of Southeast Asian Nations		Centre
BBS	electronic bulletin board system	IFI	international financial institution
BOOT	build, own/operate, transfer	ISO	International Standards Organization
BOSS	Business Opportunities Sourcing System	ITAC	International Trade Advisory Committee
CCC	Canadian Commercial Corporation	ITC	International Trade Centre
CIBS	Canada's International Business Strategy	MAPAQ	Ministry of Agriculture, Fisheries and Food of Quebec
CIDA	Canadian International Development	MDB	multilateral development bank
	Agency	MNE	multinational enterprise
CIS	Commonwealth of Independent States	NAFTA	North American Free Trade Agreement
CSA	Canadian Standards Association	NATO	North Atlantic Treaty Organization
DFAIT	Department of Foreign Affairs and	NRC	National Research Council
	International Trade	NRCan	Natural Resources Canada
DFO	Department of Fisheries and Oceans	NRCan-CFS	Natural Resources Canada —
DND	Department of National Defence		Canadian Forest Service
EC	Environment Canada	NST	National Sector Team
EDC	Export Development Corporation	OECD	Organization for Economic
EU	European Union		Co-operation and Development
FITT	Forum for International Trade Training	PEMD	Program for Export Marketing
FORDQ	Federal Office of Regional	D&D	research and development
	Development — Quebec	KQD COT	acioneo and technology
FSU	former Soviet-Union	SAL	Sectoral Advisory Croup on
FTA	Canada-U.S. Free Trade Agreement	SAGII	International Trade
GATT	General Agreement on Tariffs and Trade	SME	small and medium-sized enterprise
GDP	gross domestic product	UNED	United Nations Environmental Program
GNP	gross national product	WED	Western Economic Diversification
HRDC	Human Resources Development Canada	WTO	World Trade Organization

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