In addition, the creation in the summer of 1996 of the Arctic Council offers opportunities to enhance circumpolar trade. Under the Arctic Sustainable Development Initiative, eight Arctic countries will address the challenge to expand environmentally responsible economic activity in the Arctic.

Indigenous-to-Indigenous Consulting and Technology Transfer: Canada has expertise and a competitive advantage in this area. Also, development banks and agencies are interested in supporting specific initiatives. As a result, a subsector team is to be set up to focus on trade development and will:

- review inter-Indigenous business and development projects supported by the sector team;
- identify the major problems encountered by Aboriginal companies and determine their needs to access international opportunities;
- identify opportunities and provide co-financing and joint management for international business initiatives by Aboriginal companies; and
- develop strategies and plans to promote inter-Indigenous business links, including improved communications and information for missions.

Major Market Products and Services:
Products and services that fall under this heading are those whose production bears no necessary relation to the heritage of the company's owners.

To support Canadian Aboriginal firms in pursuing new markets, the government will focus on helping firms to overcome barriers and enable them to be integrated into the broader export community.

The strategy is to:

- provide services to the exporting community as a whole, so that companies can take advantage of current information and can learn the lessons of other exporters;
- work directly with exporters to ensure access to government export services. For example, a trade "focal point" located in the Aboriginal Business Canada offices across Canada will help stream clients into existing trade development services offered;
- complement these services and "bridge the gap," where necessary, to enable clients to take advantage of market opportunities;
- provide business-planning support;
- provide financial support for marketing initiatives, missions and trade shows abroad, and special activities that promote Aboriginal trade opportunities;
- help clients take advantage of the full range of information, intelligence, databases and networking support offered through the Canada Business Services Centres and International Trade Centres:
- ensure that firms are registered in federal export-promotion databases; and
- participate in special sectoral and advocacy initiatives sponsored by Aboriginal Business Canada.

#### Contacts

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# **ADVANCED MANUFACTURING TECHNOLOGIES**

Advanced manufacturing technologies (AMT) are key to creating significant advances in discrete product manufacturing and in resources, primary and other processing applications. They enable firms to more rapidly produce higher-quality, lesscostly products with enhanced features. Plants can become more agile, flexible and efficient. Products and systems incorporating AMT are used to enhance design, scheduling, production. storage and distribution activities. AMT are embodied in machine tools: computer-controlled machinery; machine vision systems; robotics; automated production and processing systems; process sensors; and instrumentation and control systems. AMT in the form of industrial software are closely associated with product and process design and control.

Canadian providers of AMT include hardware suppliers who develop technologies and supply products, systems integrators or applications specialists who develop and engineer systems using available components, and software developers of design and control systems. In this report, "AMT suppliers" will include all AMT providers. AMT applications are usually developed in close collaboration with users, providing them with technology solutions to their growth and competitiveness challenges.

# **Main Challenges**

#### Sector Identity

The AMT sector is neither easily nor well identified. Its economic role and significance are not obviously displayed. Constituent companies are not easily identified, and Canadian AMT strengths not generally well-known or broadcast. As an increasingly important activity, the capabilities of Canadian AMT suppliers must be understood, reinforced and promoted, both to meet the challenges posed by competing initiatives in other countries and to exploit Canadian strengths in world markets.

## Market Intelligence

The AMT sector consists primarily of many small firms that are highly dependent on technology and extremely export-oriented. Generally, they lack resources required for extensive market intelligence or for easily taking advantage of foreign business opportunities. To become new exporters or to expand in existing and new markets, they need to connect to specific potential partners and clients. In developing trade opportunities, the search is for customer problems that are amenable to leading-edge technology solutions. Customers may reside in any sector, and possible solutions can often be defined only through on-site consultations. Because Canadian suppliers represent very diverse capabilities, it is difficult to guide foreign representatives abroad toward specific new recipient sectors that would be compatible with Canadian strengths. Considerable exposure to AMT activities is required to identify the most worthwhile opportunities to pursue.

### Domestic Competitiveness

Although it is increasingly important for Canadian manufacturers to be competitive with their U.S. counterparts, the domestic market has been slow to adopt AMT. A contributing factor may be a view held by some that North America is a single market with no significant country or regional differences. Trade in AMT can help to promote domestic competitiveness by identifying and exploiting those opportunities abroad that are applicable to major Canadian markets, such as forestry and wood processing.

#### Market Relevance

For most Canadian AMT firms, the United States is a very important export market with regions of major interest. Canadian companies need to monitor changes, and maintain and enhance their access to this market and to U.S. technology. The significance of other countries is highly dependent upon the technology and applications, which tend to be company specific. Familiarity with the interests of specific companies is the key to assessing their market development stage, identifying potential opportunities and