

Constraints

Barriers preventing foreign firms from engaging in oil and gas exploration and development in China include the lack of access to prime exploration areas, unclear regulations, and evolving policies controlling price reform.

Action Plan

The objectives of the action plan for this sector are as follows:

- ♦ to foster further knowledge of Canadian capabilities among Chinese decision makers through exchanges, exhibitions and training missions;
- ♦ to monitor the evolving oil and gas development policy in China in order to provide timely information to Canadian businesses on potential opportunities in the sector; and
- ♦ to promote Canadian companies as reliable and capable partners in China's overseas ventures.

Transportation

Mainland China

Business Environment

Despite considerable and ongoing improvement and a recognition of the enormity of the task ahead, China's transportation infrastructure continues to be a business development bottleneck. Nonetheless, China remains the largest potential infrastructure market in the world, presenting remarkable opportunities for Canadian engineers, suppliers and investors.

Aviation: In the period from 1986 to 1996, China's air passenger volume grew 16 percent annually before the Asian financial crisis dropped growth to only 1.5 percent in 1998. Since then, growth rates have recovered somewhat, and both Airbus and Boeing — China's key large aircraft suppliers — still target China as their major growth market. Regional aircraft opportunities are now beginning to emerge, keeping pace with

China's expanding aviation infrastructure and a more demanding passenger market.

Air passenger and cargo growth is fueling a necessary and ambitious nation-wide airport construction, expansion and modernization program. Beijing and Shanghai have opened major new international airports in 1999, and Guangzhou, Hangzhou, Nanjing and Fuyang have major projects of their own under way. Thus far in 1999, there are 27 airport-related projects in progress. To better attract foreign expertise and capital, foreign investment and management regulations have been somewhat relaxed.

With a proposed budget of approximately \$1.8 billion, China is moving ahead with plans for some 10 major regional air traffic control centres.

Rail and Sea: China's railway sector, one of the last bastions of China's planned economy, has been an enormous, insensitive and sprawling monopoly for decades. The ongoing emergence of a highway system in China is providing strong competition to the railway monopoly, which is expected to force a dramatic reform and modernization within China's railway sector. Plans are under way to build a railway network by 2005 to connect China's three major economic regions, including the Northeast, Bohai Bay and Yangtze Delta. A high-speed train service between Beijing and Shanghai is under discussion, and a project could be initiated as early as 2000. A 200-kph electric train service has been established on the highly profitable Guangzhou-Shenzhen-Hong Kong route in South China, using European technology.

Expanding Airports — Projections for 2005

	Passengers (millions)	Freight (tonnes)
Hong Kong	35	3 000 000
Beijing Capital International	35	780 000
Shanghai Pudong International	20	500 000
Guangzhou Hua Du	27	800 000
Chongqing	5	110 000

Source: China Trade Report and Canadian Missions

Reflecting transportation system inefficiencies, over 80 percent of containers received or shipped at Chinese ports do not travel more than 50 kilometres beyond the port terminal. Chinese government and international development bank specialists are aware of the problem, and work is under way to dramatically improve China's intermodal transportation efficiencies.

With 18 000 kilometres of coastline along with major river and canal systems, China's marine transportation industry and ports infrastructure is also very large. Annually, 1.3 billion tonnes of cargo are handled through the over 2000 ports that have a capacity of 10 000 tonnes or more. Shipbuilding is also a key economic activity, although China's industry is facing renewed competition from Korea and Japan in the wake of the Asian financial crisis.

Road/Automotive: Despite becoming the world's tenth-largest auto producer in 1998 (1.6 million vehicles), the large majority of China's automotive industry is not competitive internationally. However, with major investments by multinational car makers like General Motors, Volkswagen and Honda, China's automotive sector is undergoing a significant expansion and transformation. The consolidation of smaller and less-efficient auto and truck manufacturers will continue through the next few years.

Road infrastructure is growing in conjunction with the rapid rise in vehicle use. In 1996, China launched a 35 000 km National Trunk Highway System (NTHS). The first four core highways (12 000 km) will be completed and open to traffic by 2002. In addition to NTHS, provincial governments have also set their own road construction plans, and currently build expressways to ease transportation within their provincial boundaries. Urban road systems in most major cities are being expanded and upgraded on an ongoing basis, to keep pace with the increased usage.

Market Opportunities

Airport expansion and air traffic control systems present a good chance for Canadian industry to showcase advanced technology and capabilities, which can range from designing, supplying equipment, and even consulting services. Foreign participation in the operation and management of airports in China is an increasingly viable option,

which could benefit from Canadian expertise in commercial planning and development.

Many Chinese pilots have been trained in Canada, and such training opportunities will continue as fleets expand.

Fifteen cities in China have applied for central government permission to build \$25 billion in subway and urban passenger rail systems. Despite double-digit growth in urban roads, construction still fails to keep pace with the increase in vehicles. Canadian companies that can offer solutions to urban and highway congestion will find opportunities in China.

Canada's positive reputation in the intelligent transportation systems sector represents a strong lever for the application of Canadian technology-based solutions to address critical transportation problems. The challenge will be to convert this awareness into commercial business.

With more and more North American automotive manufacturers expanding their operations in China, Canadian auto parts manufacturers may benefit from the traditional supplier-assembler relationship to sell to China's auto market. Such a plan will almost certainly require a commitment to localize assembly or manufacture, but could result in a foothold in one of the world's most promising markets.

Constraints

As in other developing countries, China lacks the necessary funds to purchase foreign products. In many cases, particularly with large-scale infrastructure projects, China requires equipment suppliers to provide export financing, to arrange project financing or to provide direct investment, in order to conclude the transaction.

Customs tariffs are generally high. The process of WTO accession will address this over time, but tariffs will remain a barrier to trade for many years. As a result, there is a strong incentive to localize manufacturing or assembly operations in China, as a means of reducing product costs.

Services are still undervalued in comparison to actual products. Therefore, engineering services will be more effectively marketed if they are incorporated into a larger transaction.

