various forms of subsidies and "buy-local" preferences. Increasingly, however, market reforms are driving Chinese mining and processing companies to seek productivity-enhancing capital investments, resulting in a fresh look at foreign capabilities and leading-edge technologies. Demand for such equipment is expected to remain strong until at least early in the new millennium, and could be bolstered further if mining policy reforms stay on track.

Hong Kong

Although Hong Kong does not have any natural resources, it is an important centre for metals and minerals trade activities. Easy access to information, good communications facilities, no foreign exchange controls, efficient shipping and good banking services contribute to Hong Kong's success as a trading hub. International trading houses and Chinese "window companies" in Hong Kong are potential buyers for Canadian products, such as potash, sulphur, methyl alcohol, aluminum, nickel and zinc — products that may eventually be re-exported to Mainland China.

Market Opportunities

China is slowly shedding its status as a very highrisk mining investment destination. Increasing reforms in the mining sector and gradual improvements to foreign investment liberalization are beginning to make China more attractive to Canadian mining exploration and operating companies. At the time of writing, Canadian mining companies, particularly in the gold and non-ferrous metals sectors, have been stepping up their investment activity. Foreign investment in exploration is an increasing priority for China's governments nation-wide, but especially in under-developed provinces in northeastern, western and southwestern China. Emphasis is placed on identifying and developing new sites for iron ore, copper, gold, silver, zinc, uranium and phosphorus.

Enhanced rationalization and competition in the Chinese mining sector, coupled with tougher environmental requirements, are also creating new opportunities for Canadian equipment and services firms in several niche areas. These include:

- tailing management;
- site rehabilitation;

- smelter technology and products;
- safe production and disposal of minerals and metals;
- high technology computer applications;
- global positioning systems (GPS);
- advanced drilling technology;
- energy-efficiency applications;
- greenhouse gas emission controls; and, in general,
- productivity enhancement and applications to extend to the service life of materials and products.

Canadian firms that are prepared to enhance localization, transfer technology or skills, and provide financing will increase their prospects for success in China.

China remains a significant importer of the following metals and minerals: ore concentrates and scrap, copper concentrates, alumina, potash, sulphur, phosphorus and asbestos.

Constraints

As a large, regionalized and rapidly changing market, China requires significant market development time and resources. For equipment and services, these challenges are compounded by strong local capabilities for conventional equipment. For more sophisticated products, foreign competition is well-established and aggressive. Many mines have tended to purchase lower-quality domestic equipment because of restricted budgets and limiting foreign exchange regulations. Availability and reliability of market information tends to be weak. Procurement decisions are increasingly being made at local levels. For exploration and mining development, Canadian firms still face an uncertain regulatory environment and extensive red tape at different levels of government.

Action Plan

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

 to produce sectoral overview studies on gold, non-ferrous metals and mining equipment;

- to assist Canadian firms in their exports and related joint investment, particularly in navigating administrative and regulatory requirements;
- to track, analyse and influence new policies and regulations affecting the mining investment environment;
- to increase Chinese familiarity with Canadian capabilities through incoming missions, trade shows and seminars; and
- to promote Canadian company interests through Canada-China working groups pertaining to minerals and metals.

Natural Resources — Oil and Gas

Business Environment

In an effort to make the industry more competitive, China's petroleum industry underwent a major reorganization and bureaucratic restructuring following the March 1998 session of the National People's Congress. China's oilfields, refineries, petrochemical firms, chemical fibre makers and gas stations, which were previously controlled by the China Petroleum and Natural Gas Group Corporation (CNPC), the China National Petrochemical Group Corporation (SINOPEC), and the former Ministry of Chemical Industry are now under the control of two vertically integrated holding companies — CNPC and SINOPEC — which are divided along geographic lines at the Yellow River. A much smaller company, China New Star National Petroleum Corporation, remains in operation and is authorized to enter into relationships with foreign companies. Offshore operations are under the mandate of the China National Offshore Oil Corporation (CNOOC).

Regulatory power now rests with the newly formed State Administration of Petroleum and Chemical Industry (SAPCI), with the State Development Planning Commission (SDPC) setting macroeconomic targets, adjusting prices, and implementing various reforms in the sector.

Market Opportunities

As output from China's aging oilfields stagnates, and the development of new areas intensifies, many opportunities exist for Canadian oil and gas equipment and service companies to provide advanced technologies to enhance oil recovery and exploit new sources. To maintain production at the eastern oilfields, China will need increasingly sophisticated technology and better management. This has led to opportunities for foreign oil companies to enter into incremental recovery and production-sharing agreements with China's oilfields, and for the sales of advanced technology and equipment into China.

As China continues to invest in petroleum projects in other countries, more occasions will arise where Canadian companies could participate in a Chinese-led project overseas. Since Canadian expertise in this area is recognized internationally, and given our friendly bilateral relations, third-country co-operation is a viable approach for Canadian companies interested in export market.

Although China has a large natural gas resource, its use is limited by the remote location of the gasfields and the lack of transportation and infrastructure facilities. As part of its strategy to alleviate energy shortages and diversify supply sources, China is set on establishing a network of transnational and national pipelines. Progress has been slow due to low gas prices, difficulty in financing, and a lack of co-operation from neighbouring countries. However, the pipeline network is a reality in China's overall energy strategy, and offers potential opportunities. For instance, China is encouraging the use of natural gas as an alternative to coal and gasoline.



CNPC - Alberta Petroleum Centre promotes the development and transfer of advanced petroleum science and technology between Canada and China. For more information on business opportunities in the petroleum sector consult its website at http://www.altabjo.cn.net

