#### **Action Plan**

The objectives of the Action Plan in this sector are as follows:

- to strongly support individual Canadian companies or groups of companies in their pursuit of specific project opportunities;
- to use the National Electricity Roundtable to disseminate regular updates on regulatory and other developments in the sector;
- to identify specific opportunities for Canadian companies, and inform Chinese counterparts of Canadian expertise in the electric power sector;
- to introduce Canadian firms to Hong Kong investors and developers who are considering financing power projects in China; and
- to address market access issues through bilateral and multilateral means.

# **ENVIRONMENT**

### **Business Environment**

Environmental degradation is a difficult and costly problem in China. China suffers at least US\$12 billion in direct economic losses from pollution every year, with air and water pollution posing the most serious challenge. Recognizing the need to address these challenges, the Chinese government has adopted sustainable development as part of its economic growth strategy under its Ninth Five-Year Plan. At the same time, the Chinese government has established the goal of increasing investment in environmental pollution control to 1.5 percent of gross national product (GNP) by the year 2000, from the current rate of 0.85 percent.

#### Environmental Clean-up: a Financial Challenge

Over US\$7.83 billion for each of the next three years will be required to address China's pollution problem. That figure represents 62 percent more than the total amount spent between 1991 and 1995 on pollution control. The majority of these funds will have to be raised abroad, due to limited capital available from Chinese government sources.

International financial institutions (IFIs) such as the World Bank (WB), Asian Development Bank (ADB), various United Nations agencies and Japan's Overseas Economic Co-operation Fund (OECF), are committing significant funding to help China maintain sustainable growth. However, even with loans from these international lending organizations, China will still be required to turn increasingly to the private sector to meet capital costs.

A recent water build-operate-transfer (BOT) project approved by the State Planning Commission is seen as an experiment by the Chinese government in seeking alternate funding mechanisms. In Hong Kong, the availability of financing for environmental projects makes it attractive to firms able to offer products and services that complement local capability.

## **Market Opportunities**

Water: Treatment of water pollution is one of China's highest economic infrastructure priorities. Water supply issues remain unresolved in nearly all of China's towns and villages. More than half of China's 600 cities lack 30 million cubic metres of water. Pollution of existing water sources by untreated industrial effluence and sewage is rapidly increasing. Given the severity of the problem,

numerous business opportunities for Canadian companies exist in municipal and industrial waste water treatment equipment, environmental monitoring and analytical instruments, and advanced technology for prevention and control of water pollution.

Emission Control and Treatment: Particles and smoke from burning coal remain the primary cause of air pollution. However, the rapid increase of the number of automobiles has created a serious problem with vehicle exhausts. This is particularly evident in large metropolitan areas. With the introduction of emission tariffs, Chinese buyers, including municipal governments, state-owned enterprises and foreign investors, are looking for products and services in air pollution control. Desulphurization technologies, vehicle emission control and flue gas dust removal services are in particular demand.

#### Constraints

A lack of funding continues to be the biggest obstacle to China's environmental clean-up efforts. IFIs and bilateral aid cannot satisfy China's environmental control needs. The Chinese authority is exploring greater participation from the private sector, including BOT schemes. Despite this effort, the current BOT structure still provides an insufficient rate of return to attract significant foreign investment.

China has extensive environmental protection legislation but lacks the necessary enforcement mechanisms. Several new regulations were introduced in 1996, including a White Paper on Environmental Protection, a revised Air Pollution Law and the amendment of Criminal Law to include environmental pollution offences. Despite these legislative advances, China's environmental

agencies still lack the resources to enforce these regulations.

There is little financial incentive for China's private sector to adhere to environmental guidelines. Since the costs for retrofitting factories are much higher than the fines imposed on polluters, most Chinese businesses still prefer to pay a fine rather than installing pollution-control facilities.

Canadian companies wishing to enter China's market for environmental goods and services will face fierce competition from the United States, Germany, Japan, as well as domestic producers. To be successful, Canadian companies must have a well-focussed strategy and a long-term commitment, and must maintain a continuous local presence.

#### **Action Plan**

The objectives of the Action Plan in this sector are as follows:

- to participate in ETC '97 (Environment Technology China) to be held in Shanghai in November 1997;
- to encourage and support Chinese delegations to participate in the Globe '98 Conference, to be held in Vancouver, B.C. in March 1998;
- to help Canadian companies to identify local agents, distributors, licensees, and joint venture partners in China;
- to pursue co-operation and business opportunities under the Memorandum of Understanding on Environmental Co-operation signed between China and Canada;
- to organize technical workshops to introduce Canadian capability in water and emission control to Chinese end-users; and

