



NATIONAL ROUND TABLE ON THE ENVIRONMENT AND THE ECONOMY  
TABLE RONDE NATIONALE SUR L'ENVIRONNEMENT ET L'ÉCONOMIE

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# CANADIAN SUSTAINABLE CITIES INITIATIVE: TEMPLATES TO DEVELOP ACTION PLANS FOR SIX "STARTING CITIES"

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David Morgan and David Crenna edited the background information for the templates in all cases. Any errors or omissions in the background data and information supplied here remains the responsibility of The Bayswater Consulting Group, Inc.

C. David Crenna  
President

# **1. INTRODUCTION**

## **1.1 Purpose**

This report offers six "templates" to help teams of Canadian organizations to develop action plans for sustainable cities initiatives in urban regions around the globe. The templates are intended as starting points for dialogue among Canadian companies, non-governmental organizations and government agencies seeking to engage in complementary ventures. They result from work to collect background information by The Bayswater Consulting Group, Inc. on behalf of the National Round Table on the Environment and the Economy (NRTEE). To a certain extent, they also arise from discussions with a variety of experts familiar with the individual cities and regions to be addressed and with the challenges of achieving sustainable cities more broadly.

## **1.2 Scope of the Challenge**

The Sustainable Cities Initiative of the National Round Table on the Environment and the Economy (NRTEE) focuses on one of the greatest combined environmental and economic challenges of the 21st century: the ballooning population of the world's urban regions in the next 25 years. Up to 90 per cent of the world's next 3 billion people will live in cities and towns, primarily in the developing world. Trends in Asia illustrate the scale and speed of urbanization. Urban dwellers constituted 22 per cent of total population in 1965, and reached 33 per cent in 1995. Experts project that by 2025, 55 per cent of the increased total population will be urban dwellers. (The Annex to this report contains some basic indicators on the six cities and countries selected as starting points for combined Canadian action.)

The World Bank estimates that as much as \$200 billion a year over the next decade must be spent on urban infrastructure -- energy, water, sewers, waste management, transport, telecommunications -- in Asia alone to keep up with growth. Including other parts of the developing world could yield an amount as high as \$4.5 trillion dollars of needed investment in the next 10 years.

Decisions being made today about urban infrastructure, buildings, and even products and services will have on-going impacts, both positive or negative, for decades. If Canadians hope to make a positive contribution to global sustainable development, nothing is so important as "getting cities right". The Sustainable Cities Initiative focuses on developing innovative methods to help get cities right and to increase Canada's prestige and profits at the same time.

### **1.3 What Vital Canadian Interests Are at Stake?**

Canada's interests in sustainable cities around the world may at first appear to be indirect and tangential. In reality, there are many direct economic, political and environmental benefits to Canadians.

For one thing, dozens of Canadian-based multi-national firms have long-term interests in the stability, livability, and economic viability of the urban regions in which they invest and operate. Canadian non-governmental organizations and development assistance agencies are vitally concerned to be effective with their projects and programs and to help move societies toward self-sufficiency and independence.

Canadian financial institutions want to reduce risks of foreign holdings arising from either political or economic instability. Today's huge urban-industrial complexes affect everyone through global climate change, marine pollution and airborne toxic substances.

Moreover, the largest future markets for much of what Canada produces and exports lie in urban regions around the globe, especially in such fields of competitive strength as mass transit, infrastructure engineering, telecommunications, information technology, housing, and environmental technologies.

### **1.4 Defining a Canadian Sustainable Cities Initiative**

According to NRTEE consultations with a variety of stakeholders since the beginning of 1998, a Canadian Sustainable Cities Initiative should seek to engage teams of experts, investors, suppliers, and public sector agencies in integrated planning, environmental management and development work, always in collaboration with local partners, and in particular with municipal authorities. The aim would be to remain continuously engaged over a substantial period, perhaps up to 10 years, until a significant difference in both economic and environmental trends has been achieved.

Private sector companies, non-governmental organizations, individual units within government, and individual urban experts already express considerable interest in a "teaming" approach to analysis, marketing, financing, and project management in a variety of urban settings. It remains to find and "road-test" the most effective vehicle for doing so.

Especially in the context of the growing world crisis of urban investment and unemployments, it is essential to capitalize on this interest and to present to potential participants, relevant information and advice on selected "priority cities" during the autumn of 1998. The aim is to permit timely verification of viability and interest by key stakeholders and to have cities ready to be "piloted" beginning early in 1999.

## 1.5 How Six "Starting Cities" Were Selected

Over the period March-April of 1998, The Bayswater Consulting Group, Inc. worked for the Canadian Department of Foreign Affairs and International Trade (DFAIT) and the NRTEE to "map" environmentally-salient Canadian activities in cities and urban regions around the globe. They started with databases prepared by the Canadian International Development Agency (CIDA) and the International Development Research Centre, and then proceeded to supplement this with information drawn from the Internet, trade show literature, environmental industry associations, international trade missions, and replies from individual development organizations and companies.

The result was a "pool" of 172 cities and urban regions in which there was at least one Canadian project and/or interested organization engaged in some aspect of urban planning, infrastructure design and development, construction, provision of urban services, and/or municipal government capacity-building. These in turn were analyzed in detail to determine the breadth and depth of existing relationships. That is, were the Canadian connections with urban issues diverse and deep, or narrow and shallow?

This assessment in turn resulted in a "short list" of 22 cities or regions in which Canadian engagements seemed to be varied and significant, comprising both development projects and commercial ventures. These received most attention in preparing the starting "portfolio" (See table, next pages).

Five main variables came into play in determining the most appropriate starting cities and regions from amongst this shorter list:

- presence of a current or planned major public-private partnership or similar multi-faceted project to act as *an "anchor" for integrated development agency and company interest*;
- presence of reasonably stable, reform-oriented *government leadership and government structures* in the prospective urban region, and perhaps more generally in the country concerned;
- a substantial, documented degree of urban environmental *need, coupled with some signs of recognition on the part of municipal leaders that this need exists*;
- demonstrated Canadian public, non-profit and private sector *capabilities* which match those needs;
- potential for environmental need to be *translated into effective demand* through financing and investment opportunities open to Canadian organizations.



**CANADIAN ACTIVITIES IN URBAN REGIONS OF  
TRANSITIONAL AND DEVELOPING ECONOMIES**

<b>URBAN REGION (TOP 22)</b>	<b>NO. OF PROJECTS</b>	<b>TYPES OF PROJECTS/RELATIONSHIPS</b>
<b>1. Santiago, Chile</b>	22	17 private sector venture agreements for urban projects. 2 community development NGOs engaged in urban issues. 2 university research partnerships. 1 development research project (construction).
<b>2. Buenos Aires, Argentina</b>	19	14 private sector venture agreements for urban projects. 4 partnerships for technical education and training. 1 partnerships for Internet technology transfer.
<b>3. Bangkok, Thailand</b>	15	11 private sector venture agreements for urban projects. 2 individual university partnerships. 2 university consortia.
<b>4. Accra, Ghana</b>	13	8 private sector projects (infrastructure and environmental). 1 development research project (urban agriculture). 1 university technical education partnership. 1 municipal partnership. 1 university consortium (UNESCO Sustainable Cities). 1 development assistance project.
<b>5. Manila, The Philippines</b>	13	11 private sector venture agreements for urban projects. 1 development research project (water pollution). 1 urban training project.
<b>6. Sao Paulo, Brazil</b>	13	11 private sector venture agreements for urban projects. 1 development assistance project (water). 1 university consortium (UNESCO Sustainable Cities).
<b>7. Hanoi, Vietnam</b>	12	5 private sector urban development projects. 4 university partnerships on urban issues. 2 development research projects. 1 multi-sectoral urban consortium (governance).

**CANADIAN ACTIVITIES IN URBAN REGIONS OF  
TRANSITIONAL AND DEVELOPING ECONOMIES (CONTINUED)**

URBAN REGION (TOP 22)	NO. OF PROJECTS	TYPES OF PROJECTS/RELATIONSHIPS
8. Mexico City, Mexico	12	7 private sector venture agreements for urban projects. 3 university partnerships (assessment, research). 1 development research projects (environmental policies). 1 development assistance project (youth in slums).
9. Jakarta, Indonesia	12	8 private sector venture agreements for urban projects. 1 financial partnership for private sector urban development. 1 development research project (pollution, waste reduction). 2 university partnerships (research, training).
10. Beijing, China	10	5 university partnerships. 2 private sector urban projects. 1 research institute-private sector partnership. 1 development assistance project. 1 urban research institute project.
11. New Delhi, India	10	9 private sector venture agreements for urban projects.. 1 university partnership (research, linkages).
12. Mumbai, India	10	5 private sector venture agreements for urban projects. 3 development assistance projects. 1 development research project (solid waste management). 1 private sector/municipal consortium (sewage).
13. Tianjin, China	9	6 private sector urban ventures. 1 municipal capacity development project. 1 university partnership (water resources). 1 federal government department partnership (agriculture)
14. Seoul, Korea	9	9 private sector venture agreements for urban projects.
15. Katowice, Poland	7	6 private sector urban development projects. 1 university consortium (UNESCO Sustainable Cities).

**CANADIAN ACTIVITIES IN URBAN REGIONS OF  
TRANSITIONAL AND DEVELOPING ECONOMIES (CONTINUED)**

URBAN REGION (TOP 22)	NO. OF PROJECTS	TYPES OF PROJECTS/RELATIONSHIPS
16. Dakar, Senegal	7	4 development assistance projects. 1 municipal partnership. 1 university partnership (water research). 1 university consortium (housing).
17. Dar es Salaam, Tanzania	7	4 urban research partnerships. 1 development assistance project (housing). 1 urban research partnership. 1 university consortium (UNESCO Sustainable Cities).
18. Rio de Janeiro, Brazil	6	2 private sector venture agreements for urban projects. 2 university partnerships. 1 private sector development assistance project (energy). 1 urban training project.
19. Port-au-Prince, Haiti	6	4 urban development assistance projects. 1 university partnership (urban planning). 1 university consortium (training).
20. Shanghai, China	6	3 private sector venture agreements for urban projects. 2 university research partnerships. 1 development research project (pollution control).
21. Cebu City, The Philippines	5	3 private sector venture agreements for urban projects. 1 municipal partnership. 1 major development assistance project (water management).
22. Lima, Peru	5	3 development assistance projects for urban issues. 1 development research project (housing). 1 urban planning project (World Bank funded).

In each case, the consultants checked the most authoritative available sources of information and data, including that offered in reports by International Financial Institutions. Their aim was to develop sound intelligence reports for consideration by Canadian governments, research institutes, non-governmental organizations, and companies. At the same time, they were seeking to gauge Canadian interest in a sustainable cities initiative and to assess ways in which such an initiative can be made more explicable and credible.

While all 22 cities in the above list have a definite need for concerted action on urban environmental issues, and many also meet at least some of the criteria listed above, a further 16 had to be regrettably excluded at this stage of consideration, for various reasons:

- Those in India were omitted at this stage because of larger international security considerations which make it inadvisable to start new Canadian initiatives there.
- Several cities in East Asia -- Jakarta, Seoul, Bangkok, and others -- have been hard hit by the current financial and economic crisis. While their environmental needs are no doubt even greater than before, both the likely distraction of their urban leadership and the potential lack of Canadian commercial interest to link with development assistance militated against them as starting cities. More groundwork is needed in these cases.
- While Africa is an immensely important region for Canadian development assistance in particular, it appeared essential to have a very solid commercial focus for any city or region chosen there. This criterion excluded many of the candidates.
- As can be seen, the vast majority of the urban regions in the above list are capitals of their countries. While inclusion of some capitals was considered both necessary and desirable, many Canadian urban experts believe the best chances probably lie outside of the capital cities in several countries. Thus Beijing was not included, though higher on the list than Tianjin, a large city nearby which receives much less attention. Similar reasons similarly dropped Rio de Janeiro and Shanghai from the list.
- While there are good Canadian linkages with many cities in the Caribbean, Port au Prince appears to be too challenging at the moment to attract much private sector interest. Development assistance projects could be coordinated more actively outside a formal Sustainable Cities Initiative.

- Among the cities of Latin America, there are many attractive candidates. A final selection of Santiago and Buenos Aires was made on the basis of comments from regional experts on the relative ease of doing business in them compared to others, and the substantial volume of relevant commercial interest already operating in a "sustainable cities" theme, e.g., in offering energy-saving technology. While Buenos Aires is another highly competitive market for infrastructure projects, with a politically charged atmosphere, it seemed worth the risk because of the commitment of senior government officials to privatization and reform, and the evident interest of local people in what Canada has to offer.

On a positive note:

- The next comprehensive trade mission led by the Prime Minister of Canada will be to Eastern Europe. Both for this reason, and because of long-term Canadian environmental, economic and cultural interests in this region, it appeared wise to have at least one from there. Poland appears to have progressed farthest toward market reforms and a favourable climate for private sector investment.
- Consultations with World Bank experts indicated strong interest in seeing Canada take a role in Hanoi, Vietnam, where Canada already has a very substantial urban environmental investment via CIDA.
- Active interest by Canadian companies or non-governmental organizations ready to play a leading role in starting city teams tipped in the direction of Accra, Katowice, and Tianjin. In each of these cases, it was clear that Canadian capabilities exist to meet the environmental needs.
- The Federation of Canadian Municipalities and individual Canadian urban centres have long-term experience working with cities around the world including some of the cities selected for greater attention as prospective "Sustainable Cities".

**"TWINNING" ARRANGEMENTS BETWEEN CANADIAN AND  
SELECTED STARTING CITIES**

CITY	PROGRAM	CANADIAN TWIN CITY
Accra, Ghana	CIDA-funded partnership	St. John's
Hanoi, Vietnam	CIDA-funded partnership	Montreal
Santiago, Chile	Individual twinning	Ottawa
Tianjin, China	China Open Cities Project	No specific city

## **1.6 Profile of the Starting Cities**

The table on the next page outlines the features of the whole "portfolio" of starting cities from the standpoint of potential "anchor" projects; potential initiators among Canadian organizations and firms with an established presence in the given city or region, and potential focal points for initial approaches and action.

**FEATURES OF AN INITIAL PORTFOLIO OF  
SUSTAINABLE CITIES FOR A CANADIAN "TEAMING" INITIATIVE**

CITY/REGION	ANCHORS	INITIATORS	INITIAL FOCUS
Accra, Ghana	World Bank Ghana Trade and Investment Gateway project; need for site services	Consulting engineering company from Manitoba	Customs reform; infrastructure for port access; site services to nearby settlements
Buenos Aires, Argentina	Need for sewage treatment and water facilities; privatization of major public facilities with World Bank and IADB involvement	Match-making company in environmental technologies from Ontario	Supply of urban transit equipment; wastewater treatment ventures
Hanoi, Vietnam	Expansion of electric power generation facilities; development of new towns in Hanoi region by Daewoo and Bechtel; World Bank and AsDB support for urban infrastructure upgrading	Urban planning consultants from Quebec	Energy conservation; alternative energy supply; innovations in urban infrastructure for new cities
Katowice, Poland	Alternatives to coal-fired energy generation; East European market for environmental technologies, with EBRD involvement	Canadian non-governmental organization based in British Columbia with environmental engineering firm from Alberta	Getting off coal-fired energy; integrated solid waste management; urban transit upgrading
Santiago, Chile	Ventures to transfer and produce environmental technologies; market for light building technologies; institutional strengthening of municipal governments	International non-governmental organization based in Ontario	Turning pilot projects into full-scale operations; technology transfer and training
Tianjin, China	Investment in port-related urban renovation and infrastructure upgrading	Urban planning consulting firms based in Ontario and British Columbia	Linking infrastructure development to private sector financing; urban transport alternatives

## **2. CREATING A TEMPLATE FOR ACTION PLANNING**

The blank "template" presented below and the strategic information on individual cities and regions in the following pages are intended to be used individually in round table discussions among experts in the given cities and regions selected. They seek to "set the table" for productive decision-making. They raise salient issues in relation to each aspect of seizing opportunities in and managing risks of the selected cities:

- defining the scope of the opportunities, and setting priorities among them;
- defining the range of expertise and the capabilities needed for a successful Canadian team;
- addressing the needs and requirements of the municipal authorities and prospective partners in each city, including building their capacities to undertake successful urban environmental projects;
- securing the funding and equity or loan financing required to initiate and sustain a viable project
- arranging appropriate due diligence and project risk management regimes;
- determining specific first steps in starting up a team-based project.

Note that while the template suggests there is a need for substantial "homework" in advance of action in specific cities or regions, the actual pace of work should be set entirely by the teams themselves. For example, it may be feasible to skip over or to combine some steps for a variety of reasons, in particular the degree to which due diligence has already been carried out and sound working relationships already established. Some factors may be irrelevant in the specific context of the city or region in question. For example, Canadians may decide to work mainly as suppliers to larger players from other countries, whereas the template assumes that a Canadian lead will be taken throughout the process.

The individual city/region templates which follow abstract key information from the "prospectuses" developed for each locality and available separately. They do not take the place of the complete prospectus, nor of additional opportunity analysis and due diligence research based on the extensive references provided in the prospectuses, coupled with dialogue with Canadian missions abroad, prospective team members, etc.

## SUGGESTED TEMPLATE FOR CANADIAN TEAM PLANNING AND ACTION

ACTION AREA	FACTORS	INTENDED RESULTS
1. Scoping, setting priorities among opportunities	<ul style="list-style-type: none"> <li>• Sustainable governance arrangements</li> <li>• Priority needs</li> <li>• Available financing</li> <li>• Match Canadian interests and capabilities</li> <li>• Meet competition from, beat, or partner with foreign competitors</li> </ul>	<ul style="list-style-type: none"> <li>• Ranked priorities among opportunities</li> <li>• Consensus on initial opportunity to be explored</li> <li>• Statement of action implications of chosen opportunity</li> </ul>
2. Defining the range of needed Canadian expertise	<ul style="list-style-type: none"> <li>• Urban project planning and management</li> <li>• Capacity-building and training</li> <li>• Funding and financing</li> <li>• Risk management</li> <li>• Project implementation</li> <li>• Supply of specific products, technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed team list and contact information</li> <li>• Agreed protocols for reporting and accountability to team participants</li> <li>• Scenario for participation by team members over project life cycle</li> </ul>
3. Addressing needs and requirements of municipal authorities and local partners	<ul style="list-style-type: none"> <li>• Opening doors to cooperation</li> <li>• Defining needs cooperatively</li> <li>• Developing local focal points</li> <li>• Developing local capacities</li> <li>• Creating new ventures and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed statement of joint priorities</li> <li>• Agreed local partners and participants</li> <li>• Agreed action plans with local partners and participants, including local financial contributions and contributions in kind</li> <li>• Agreed reporting and accountability arrangements between partners</li> </ul>

## SUGGESTED TEMPLATE FOR CANADIAN TEAM PLANNING AND ACTION

ACTION AREA	FACTORS	INTENDED RESULTS
<p>4. Securing funding and financing</p>	<ul style="list-style-type: none"> <li>• Meeting program application and due diligence criteria</li> <li>• Developing business plans for potential investors and financiers</li> <li>• Developing a team marketing package</li> <li>• Determining administrative arrangements for funding and financing</li> <li>• Determining reporting arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Program applications</li> <li>• Business plans</li> <li>• Team marketing package</li> <li>• Agreed administrative arrangements</li> <li>• Agreed reporting and accountability arrangements</li> </ul>
<p>5. Arranging risk management regimes</p>	<ul style="list-style-type: none"> <li>• Identifying team-based performance risks</li> <li>• Identifying project-based performance risks</li> <li>• Identifying and measuring national and local operating risks</li> <li>• Identifying global market risks</li> <li>• Arranging and costing risk insurance, management and hedging instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management plan</li> <li>• Costed insurance, management and hedging arrangements</li> <li>• Phased consortium contract among main participants based on above arrangements</li> </ul>
<p>6. Determining specific first steps</p>	<ul style="list-style-type: none"> <li>• Assessing the status of current contacts and projects</li> <li>• Determining how to manage partner expectations</li> <li>• Laying out a plan for entry and initial pilot projects or other specific actions</li> </ul>	<ul style="list-style-type: none"> <li>• Specific entry strategy and action plan</li> <li>• Results-based reporting system for participants</li> </ul>

### 3. TEMPLATE FOR ACCRA, GHANA

#### 3.1 Setting Priorities Among the Opportunities

The Accra region offers an excellent opportunity to link Canadian expertise in providing development-oriented site services to new and existing settlements with lucrative private investment in a major port upgrading project designed to make Accra a better gateway to the whole country and attract industrial ventures. It is to take place at Tema, 32 kilometres from the centre of the city, and major risks will be borne in its initial stages by the World Bank which has provided a US\$50 million credit. The port upgrading project itself is multi-faceted, with major potential roles for Canadian Federal government departments such as Transport Canada and Revenue Canada as well as private sector financing, consulting engineering and construction services.

Looking at the urban region from a wider perspective, it is poised on the brink of becoming a major economic player for the whole of West Africa, based on a government which wishes to make Ghana a positive place in which to invest. It is also serious about upgrading its infrastructure. For example, the government has passed enabling legislation in its telecommunications sector and has asked the World Bank for on-going help to implement the new policy and work on closing the large gap between demand and supply. The country is a comparatively safe one in which to operate, and Canadian businesses with long experience there rate it highly.

ACTION AREA	FACTORS	INTENDED RESULTS
Scoping, setting priorities among opportunities	<ul style="list-style-type: none"><li>• Sustainable governance arrangements</li><li>• Priority needs</li><li>• Available financing</li><li>• Match Canadian interests and capabilities</li><li>• Meet competition from, beat, or partner with foreign competitors</li></ul>	<ul style="list-style-type: none"><li>• Ranked priorities among opportunities</li><li>• Consensus on initial opportunity to be explored</li><li>• Statement of action implications of chosen opportunity</li></ul>

#### 3.2 Defining the Range of Canadian Expertise and Capabilities

Current Canadian engagement with the Ghanaian economy is not large in global terms, but exports have doubled over the past five years, and contain significant amounts of infrastructure, construction and industrial equipment. Canadian development assistance efforts have already laid a solid foundation for future work combining investment in improved site services with institutional strengthening.

Wardrop Engineering, with 23 years experience working in Ghana, developed a close working relationship with federal and local government officials, as well as local companies. Wardrop's principal expertise in Ghana is in water and sanitation systems, as well as transportation management.

UMA Environmental also offers experience working in Ghana. The company has considerable expertise in solid waste treatment and management. They recently carried out a water and sewage project to improve Accra's policy, planning and administration.

Cowater International is another company with experience in Ghana. It is currently working on a large community water project funded by CIDA, to improve the water supply to urban regions.

Other companies with experience working in Africa include Bannister Foundation with expertise in a number of areas including electrical power installation, Bechtel, which has telecommunications expertise, La Cie de Pavage d'Asphalte Beaver, offering road construction, and Janin, which has experience in railroad construction.

The Canadian Co-operative Association is active in Accra developing cooperatives involving women and micro-enterprises.

ACTION AREA	FACTORS	INTENDED RESULTS
Defining the range of needed Canadian expertise	<ul style="list-style-type: none"> <li>• Urban project planning and management</li> <li>• Capacity-building and training</li> <li>• Funding and financing</li> <li>• Risk management</li> <li>• Project implementation</li> <li>• Supply of specific products, technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed team list and contact information</li> <li>• Agreed protocols for reporting and accountability to team participants</li> <li>• Scenario for participation by team members over project life cycle</li> </ul>

### 3.3 Addressing Needs of Prospective Partners

According to a Canadian company executive with 25 years experience working in Ghana, "it is one of the best West African countries to be in". He says this for a number of good reasons. It has a relatively stable political environment, and a government that is reform oriented and open to public dialogue.

The government's decentralization program begun in 1992 has been important to urban development. The 110 District Assemblies now have the authority for planning, economic management, administration, and political decision-making. They are also responsible for providing basic services and local infrastructure.

As well, urban environmental issues have fuelled public debate in Accra for nearly a decade. Local government agencies are actively involved in these debates. In mid-1995 a city consultation, under the Sustainable Cities Program, a consensus was achieved. The week-long city consultation ended with over 150 stakeholders agreeing on priority issues for action plan development.

ACTION AREA	FACTORS	INTENDED RESULTS
Addressing needs and requirements of municipal authorities and local partners	<ul style="list-style-type: none"> <li>• Opening doors to cooperation</li> <li>• Defining needs cooperatively</li> <li>• Developing local focal points</li> <li>• Developing local capacities</li> <li>• Creating new ventures and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed statement of joint priorities</li> <li>• Agreed local partners and participants</li> <li>• Agreed action plans with local partners and participants, including local financial contributions and contributions in kind</li> <li>• Agreed reporting and accountability arrangements between partners</li> </ul>

### 3.4 Securing Funding and Financing

In the recent past, CIDA-funded development projects focused on Accra have included: an FCM, City of St. John's twinning project aimed at strengthening Accra's administrative and financial management, as well as supporting environmental and social initiatives within the city; a technical education project through the University of Regina; a university consortium of the Centre for Urban and Community Studies, University of Toronto and INRS - Urbanisation of Québec, conducting research and development cooperation projects as part of UNESCO's *Socially Sustainable Cities Initiative*; a technical assistance program through the Canadian Co-operative Association (CCA) for training and institutional support to the Ghanaian Co-operative Credit Union Association. CIDA and CCA have been supporting the Ghana office since 1988.

Foreign assistance agencies are supporting capital investments in urban infrastructure and technical assistance for urban planning and management in Ghana. The bulk of the external capital funding is currently going into urban roads and water supply. Urban sanitation, drainage and area upgrading have received very limited funding.

The International Development Association (IDA) is the major financing agency in the urban roads sector through the Urban II Project and the Urban Transport (UTP) and Local Government Development (LGDP) Projects. IDA and the African Development Bank (AfDB), and several bilateral projects are assisting in water supply. The German Kreditanstalt für Weideraufbau (KfW) and Gesellschaft für Technische Zusammenarbeit (GTZ) are supporting a project, begun in 1985 and continuing, to strengthen the Accra Waste Management Department.

The IDA-supported Urban II Project is also rehabilitating the waterborne sewage system in the central part of Accra. The limited system has very few properties connected to it and has fallen into disrepair.

The UNDP and UNCHS both actively support technical assistance for urban activities in Ghana. The Sustainable Cities Programme (SCP) is a capacity building programme established in the early 1990s. The Sustainable Accra Programme is funded and supported under this programme. For Accra, the programme identified the priority issues as sanitation, including solid waste management, liquid waste management, pollution of Korle Lagoon, institutional capacity building, and enforcement of regulations.

The World Bank provided support for urban development in Ghana through several operations since 1985. In 1995 and 1996, the World Bank initiated a project in the amount of US\$71.0 million on Urban Environmental Sanitation in Ghana that includes Accra. Bank assistance has focused on the rehabilitation of urban infrastructure and services (roads, water supply, sewerage and sanitation, drainage, solid waste, markets, public transport, traffic management, and area upgrading) and on institutional strengthening at the central and municipal levels, especially in cost recovery and revenue mobilization.

Recently, the Bank approved a US\$50 million credit for the Ghana Trade and Investment Gateway Project. The project seeks to increase the competitiveness of Ghanaian products in the global market through the reform of the legislative, regulatory, and incentive systems; institutional strengthening and capacity building; development of private participation in infrastructure; and country promotion and consensus building. The project also addresses the issue of inadequate infrastructure by supporting the development of Free Trade Zones.

ACTION AREA	FACTORS	INTENDED RESULTS
Securing funding and financing	<ul style="list-style-type: none"> <li>• Meeting program application and due diligence criteria</li> <li>• Developing business plans for potential investors and financiers</li> <li>• Developing a team marketing package</li> <li>• Determining administrative arrangements for funding and financing</li> <li>• Determining reporting arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Program applications</li> <li>• Business plans</li> <li>• Team marketing package</li> <li>• Agreed administrative arrangements</li> <li>• Agreed reporting and accountability arrangements</li> </ul>

### 3.5 Managing Risks Through Detailed Due Diligence

#### 3.5.1 Overview

Ghana experienced an inflow of foreign capital in recent years as the government has prioritized the private sector and liberalized the economy. The introduction of wide-ranging and internationally lauded IMF-supported reforms bolstered aid efforts to Ghana, which was pledged US\$1.6 billion by donors in November 1997. Medium to long-term prospects are dependent on cocoa output, world commodity prices and continuing aid flows. Ghana is currently not rated by Moody's or Standard and Poor's.

#### 3.5.2 Political Risks

President Jerry Rawlings was re-elected in 1996 with 57 percent of the vote. As there is now a real parliamentary opposition, it is expected the government will be more accountable. The peaceful conclusion of Ghana's national elections augurs well for continued political stability and reform-oriented economic policies. As long as President Rawlings enjoys the support of the military, his rule will not be threatened. Despite tensions caused by the poorly developed economy and by Ghana's ethnic diversity, political turmoil is expected to remain moderate. Rawlings' political skills and his close ties with the military and the tribal chiefs will assist him in minimizing turmoil and containing the threat of a military coup. Nevertheless, coup attempts may occur. Sporadic acts of violence by extremists among the opposition will be met with retaliatory violence by paramilitary groups loyal to Rawlings. Endemic ethnic violence may continue.

### 3.5.3 *Economic and Financial Risks*

Though the Ghanaian government maintains its interest in introducing more market mechanisms into the economy, efforts may be frustrated by the heavy external debt and inadequate private foreign investment. As a result, economic growth will be limited and inflation is likely to rise. High levels of government expenditure, the subsequent increase in the money supply and poor harvests triggered high inflation rates that averaged 50 percent in 1995 and 1996. Despite the authorities' targeted 15 percent inflation rate, in 1997 it was in the 20 - 25 percent range.

The government adopted a less expansionary stance in the aftermath of the 1996 elections, but spending will increase again as the December 2000 elections approach. Growth will be helped by economic reforms such as accelerated privatization of the parastatals, expansion of the private sector, and an easing of government controls.

Inflation will remain a problem as the economy continues to depend on volatile earnings from commodity exports and on agricultural production. Weakness in the terms of trade for cocoa and gold may hamper progress. Improvement in living standards will be thwarted by the country's high rate of population growth.

While formal policy mechanisms to collect user charges for urban services are being put in place, there are still some risks associated with actually collecting them.

### 3.5.4 *Operational Risks*

In order to comply with Ghanaian law, currency transactions must be conducted with banks or foreign exchange bureaus. Based on project experience, the World Bank recommends that attention be given early in the preparation phase to institutional development and capacity-building. This is crucial to the sustainability of a project's benefits. The institutions' ability and motivation to mobilize funds for operation and maintenance, through user fees and general revenues, is an important determinant of the scale of new investments. The willingness/ability to pay of prospective beneficiaries also needs to be taken into account in project design.

Canadian business leaders with extensive in-country experience rank Ghana and Accra as among the best places to work in Africa.

ACTION AREA	FACTORS	INTENDED RESULTS
Arranging risk management regimes	<ul style="list-style-type: none"> <li>• Identifying team-based performance risks</li> <li>• Identifying project-based performance risks</li> <li>• Identifying and measuring national and local operating risks</li> <li>• Identifying global market risks</li> <li>• Arranging and costing risk insurance, management and hedging instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management plan</li> <li>• Costed insurance, management and hedging arrangements</li> <li>• Phased consortium contract among main participants based on above arrangements</li> </ul>

### 3.6 Potential Next Steps

The next step in turning this document into an action plan for a prospective "city team" focused on Accra is to consult further with those already involved there or with an active interest in this country. The aim will be to determine whether there is an interest in coupling commercially-driven work on upgrading Tema port facilities, perhaps with World Bank financing, with tangible improvements in the water, sewer, electrical, and telecommunications services to surrounding settlements, financed by a combination of sources, including local user charges.

There would need to be formal engagement of prospective team members in:

- agreeing on main elements of a city strategy and immediate actions flowing from it;
- positioning Canadian investors for infrastructure and off-site service contracts within the World Bank Ghana Trade and Investment Gateway Project;
- partnering with CIDA to provide site services for the poorest areas connected to the World Bank Gateway Project;
- approaching the Ghanaian government, to make a joint venture proposal to the World Bank to provide telecommunications planning, equipment and services;
- agreeing on a focus/secretariat of a Canadian city team, and modus operandi;

- determining the main elements of a business plan for entry and ongoing project support, together with funding sources over the life-cycle of a major project or program;
- agreeing on how to measure results over time.

ACTION AREA	FACTORS	INTENDED RESULTS
Determining specific first steps	<ul style="list-style-type: none"> <li>• Assessing the status of current contacts and projects</li> <li>• Determining how to manage partner expectations</li> <li>• Laying out a plan for entry and initial pilot projects or other specific actions</li> </ul>	<ul style="list-style-type: none"> <li>• Specific entry strategy and action plan</li> <li>• Results-based reporting system for participants</li> </ul>

## **4. TEMPLATE FOR BUENOS AIRES, ARGENTINA**

### **4.1 Setting Priorities Among the Opportunities**

Buenos Aires is one of the largest urban regions in the world. The City of Buenos Aires is an autonomous district -- much like Washington D.C. or Mexico City -- located within the Province of Buenos Aires, but politically independent. The City's political status is equivalent to that of a province, and its administration wields significant authority in national issues because of this. Canadian company executives familiar with the local situation find the City much easier to work with than other authorities and believe that it offers a comparatively straight forward approach to contracts and other business dealings.

The municipal government has plans to spend US\$2.8 billion over the next 6 to 8 years on water, sewer systems, environmental products and technological assistance. Most investment is expected to come via privatization of municipal water and wastewater services, a trend which is leading to much greater investments, and an increasing demand for foreign environmental equipment and services. As well, the provincial government has declared that the \$1 billion obtained from the privatization of the state owned electric power utility will go to public works and housing projects.

In the Gran Buenos Aires area, the World Bank will provide technical assistance and finance investments in the amount of US\$5.3 million for air quality and noise monitoring, a vehicle certification laboratory and technical centre, the preparation of an air quality management plan, and the strengthening of the vehicle inspection and maintenance program.

The main Canadian opportunities appear to exist in promoting small-scale water, sewage treatment and energy services which pay for themselves quickly and thus embody lower risks than do larger systems. Some opportunities also exist to supply to major players from other countries engaged in transit and large-scale infrastructure development projects. In addition, the Argentine market for housing is growing rapidly and acceptance of Canadian wood-frame technology as an alternative to solid masonry construction appears to be increasing somewhat.

ACTION AREA	FACTORS	INTENDED RESULTS
Scoping, setting priorities among opportunities	<ul style="list-style-type: none"> <li>• Sustainable governance arrangements</li> <li>• Priority needs</li> <li>• Available financing</li> <li>• Match Canadian interests and capabilities</li> <li>• Meet competition from, beat, or partner with foreign competitors</li> </ul>	<ul style="list-style-type: none"> <li>• Ranked priorities among opportunities</li> <li>• Consensus on initial opportunity to be explored</li> <li>• Statement of action implications of chosen opportunity</li> </ul>

#### 4.2 Defining the Range of Canadian Expertise and Capabilities

Canada and Argentina are on very good diplomatic and economic terms, with cooperation occurring on an expanding range of issues. Canadian trade with Argentina generally rose from 1992 to 1995. Despite Argentina's economic downturn in 1995, many Canadian companies have found opportunities in Buenos Aires and are there on a full time basis.

A variety of recent initiatives in infrastructure development resulted from the Team Canada Mission in January of 1998.

AGRA Earth and Environmental Ltd. and AGRA Systems Limited of Ottawa signed a memorandum of understanding (MOU) with AMBIENTAL S.A. of Buenos Aires for the joint pursuit and conduct of environmental service projects.

CAE Electronics Inc. signed a contract with EDESUR of Buenos Aires for the supply of high-voltage transmission SCADA system consisting of a master station and 11 remote terminal units.

FGA Consulting Engineers signed a letter of intent with AICC Consultores S.A. of Buenos Aires that will lead to FGA's participation in projects in all sectors of Argentina's economy.

HYGREX Spehr Industries signed an MOU with Enertech S.A. of Buenos Aires and the National University of General San Martin for the specification, design and potential implementation of a chromium-contaminated sludge treatment plant drying facility.

MNC Group Inc. signed an MOU with AICC Consultores S.A. of Buenos Aires to transfer technology in the environmental sector, enabling AICC to offer a broader array of services to its clients.

Nexus Environment International and LIMSA of Buenos Aires signed an MOU to identify technology transfer projects in the environment sector that can be implemented by LIMSA and its parent company, IMPSA.

Universal Systems Inc. (CARIS) a software and systems integration company which develops, supports and markets geographic information systems, signed a business associates agreement with Smart S.A. of Buenos Aires.

The Université of Sherbrooke and the Universidad Nacional de Lanús, in the Province of Buenos Aires, signed a memorandum of understanding for the Université de Sherbrooke to provide expertise in environmental studies in order to help develop master's level programs and research and technology activities at the Universidad Nacional de Lanús.

Wintec EMC and NS Power Services Ltd. created NSP-Wintek, a joint venture, and signed a letter of intent with the Consorcio Gran Terminal Puerto Rosario. The project involves the delivery of a feasibility study and the design, engineering, financing and implementation of a district energy co-generation facility.

Seneca College of Applied Arts and Technology and Wintec EMC signed an MOU with the National University of Lomas de Zamora for the design and development of energy and environmental training courses. Seneca College and Wintec EMC Energy Management Corporation also signed an MOU with the University of General San Martin covering academic, cultural and scientific exchange.

Canada's CONTACTO Group has helped pave the way for financing Canadian environmental technology and service providers. With offices in Toronto, Washington, and Argentina, the company works as an information and technology brokerage firm, focusing particularly on environmental matters around urban and energy issues. The CONTACTO Group has helped to identify specific opportunities to link technology transfer from Canada with World Bank projects in Argentina.

ACTION AREA	FACTORS	INTENDED RESULTS
Defining the range of needed Canadian expertise	<ul style="list-style-type: none"> <li>• Urban project planning and management</li> <li>• Capacity-building and training</li> <li>• Funding and financing</li> <li>• Risk management</li> <li>• Project implementation</li> <li>• Supply of specific products, technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed team list and contact information</li> <li>• Agreed protocols for reporting and accountability to team participants</li> <li>• Scenario for participation by team members over project life cycle</li> </ul>

### 4.3 Addressing Needs of Prospective Partners

Argentina has a federal system of government with three levels: central, provincial and municipal. Each Province is an autonomous entity governed by its own constitution, which also provides the basic framework for its municipal governments. Specific responsibilities for service provision and sources of revenue are set out under the province's Municipal Code. Provincial and municipal governments share responsibility for elementary and secondary education, health care, water and sewerage, regional and local roads, and fire control. Municipal governments are predominantly responsible for solid waste collection and disposal, local streets and drainage, parks, markets, cemeteries, and land use planning and control. In recent years, Argentina has pursued a policy of decentralization of services thereby increasing municipalities' responsibilities if they can provide them more efficiently.

Levels of education are high, and as the economic situation continues to improve the educated populace has greater liberty to focus its attention on developing the range of organizations that make a democracy more effective. Developing "civil society" has received particular priority in the City of Buenos Aires as the political, economic and cultural hub of the country.

Corruption levels in the Province of Buenos Aires are considered to be high, but this situation does not extend to the City, which is remarkably free of corruption. Moreover, the stature of municipal politicians in the City is high. The current mayor of the City, Fernando de la Rúa, is the likely presidential candidate for the Alianza - the principal opposition to President Carlos Menem's Peronist administration.

The municipal government has also given high priority to certain projects such as rebuilding the transportation infrastructure. To aid development, some of the money raised from the sale of state-owned enterprises is reserved especially for this sector. Companies are still primarily responsible for financing arrangements.

ACTION AREA	FACTORS	INTENDED RESULTS
Addressing needs and requirements of municipal authorities and local partners	<ul style="list-style-type: none"> <li>• Opening doors to cooperation</li> <li>• Defining needs cooperatively</li> <li>• Developing local focal points</li> <li>• Developing local capacities</li> <li>• Creating new ventures and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed statement of joint priorities</li> <li>• Agreed local partners and participants</li> <li>• Agreed action plans with local partners and participants, including local financial contributions and contributions in kind</li> <li>• Agreed reporting and accountability arrangements between partners</li> </ul>

#### 4.4 Securing Funding and Financing

Environment Canada and the Canadian Department of Industry sponsor the "Southern Cone Environmental Technology Transfer Program" which includes Argentina. Under this program a variety of projects have already been funded. In September 1998, Industry Canada is sponsoring a Canadian Environmental Technology Mission to Brazil, Chile and Argentina. The mission is part of Industry Canada's assistance to the development of environmental impact assessment legislation and capabilities in Argentina and Chile.

In 1997, the Argentine government planned to spend some US\$720 million on infrastructure, primarily on highway and waterworks projects. In connection with these projects, consulting and engineering expertise is in demand.

In the environmental market, the government has plans to spend US\$2.8 billion over the next 6 to 8 years on water, sewer systems, products and technological assistance. Most investment is expected to come from the privatization of municipal water and wastewater services, a trend which is leading to much greater investments, and an increasing demand for foreign environmental equipment and services.

In the Gran Buenos Aires area, the World Bank will provide technical assistance and finance investments in the amount of US\$5.3 million for air quality and noise monitoring, a vehicle certification laboratory and technical centre, the preparation of an air quality management plan, and the strengthening of the vehicle inspection and maintenance program.

Housing sector opportunities are concentrated in the greater Buenos Aires region, which accounts for 60 percent of demand and 45 percent of Argentina's population. Potential markets include low-cost, social housing and housing for the somewhat neglected middle class. The government plans to build 150,000 low cost housing units annually from 1997 to 1999. The demand for units among lower and middle class segments of the population is also being met by provincial governments which hope to have some funding in place in 1998.

The Government of the Province of Buenos Aires has completed the first stage of the privatization of state owned electric power utility: ESEBA. ESEBA supplies electricity to 95 percent of the provinces' population. The Governor, Dr. Eduardo Duhalde has declared that the \$1 billion obtained from this privatization will go to public works and housing projects.

ACTION AREA	FACTORS	INTENDED RESULTS
Securing funding and financing	<ul style="list-style-type: none"> <li>• Meeting program application and due diligence criteria</li> <li>• Developing business plans for potential investors and financiers</li> <li>• Developing a team marketing package</li> <li>• Determining administrative arrangements for funding and financing</li> <li>• Determining reporting arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Program applications</li> <li>• Business plans</li> <li>• Team marketing package</li> <li>• Agreed administrative arrangements</li> <li>• Agreed reporting and accountability arrangements</li> </ul>

## **4.5 Managing Risks Through Detailed Due Diligence**

### *4.5.1 Overview*

Argentina is projected to be one of the lowest investment risks of the ten largest emerging markets in the world. In 1998, Standard and Poor's DRI ranked Argentina just below number one ranked Poland on the basis of more than 50 variables including governmental policies, economic trends, domestic political and economic risk factors. Over the medium term, analysts expect the export sector to continue to lead growth. Moody's gave Argentina a Ba3 rating and Standard and Poor's gave it a BB rating.

### *4.5.2 Political Risks*

Argentina has enjoyed a long period of political stability under the current president, Carlos Menem. The ruling party, Partido Justicialista (known as the Peronists), as well as all others are very focused on upcoming elections in May 1999. President Menem has given up his aspirations to revise the constitution and seek a third term. The Menem camp endorsed Ramon Ortega as its Peronist candidate for 1999. Ortega is currently National Secretary of Social Development, and a former Governor of Tucuman, a northern province. Mr. Ortega will have to face the current Governor of the Province of Buenos Aires, Eduardo Duhalde in a runoff of "pre-candidates".

The legislature is currently dominated by the Alianza, an alliance of the Union Civica Radical (commonly referred to as the Radical Party) and the centre-left party, Frepaso (composed of social democrats and former Peronists). As the chief opposition to the Peronists, the Alianza has selected two presidential pre-candidates, Fernando De la Rúa, Chief of Government of Buenos Aires City (Radical Party) and Gracielita Fernandez Meijide (Frepaso).

Both candidates are strong national figures, Mr. De la Rúa because of a strong anti-corruption stand, and Ms. Fernandez-Meijide because of her active involvement in human rights campaigns in the past against the military. Their respective popularity may mean that neither would take the low-profile vice-presidential position in favour of continuing as Chief of Government in the City of Buenos Aires (for De la Rúa) or a run at the governor's office of the Province of Buenos Aires (for Fernandez-Meijide).

One of the major policy issues in upcoming elections is the labour sector which remains plagued by an unemployment rate of around 15 percent. Analysts argue that the benefits of strong economic growth need to be shared more equitably and the flexibility of the labour market increased to insure continued stability.

#### 4.5.3 *Economic and Financial Risks*

Argentina had the fastest growing economy in Latin America in 1997, with GDP expanding by about 8.1 percent. Given the current regime's consistent economic policy, local and foreign investors have remained very confident about Argentina's economy, which went through structural reforms in public finance in the 90s. Improved revenue systems, government down-sizing and re-structuring, and privatization boosted investor confidence. Argentina's peso is pegged to the US dollar and was able to maintain that linkage despite the crisis that ensued following Mexico's financial debacle in 1994.

In the short term, economic growth is expected to slow down with the reduction in activity in Brazil. Moreover, as a result of Argentina's current account deficit and investors' concerns with the fate of the monetary region of Hong Kong, China, there has been some cooling off in the economy. Certain sectors continue to attract much of the investment, particularly mining and oil.

Obtaining credit locally is very difficult. This results from a lack of liquidity in the financial system and current banking practices in general. Letters of credit and drafts are the most common forms of payment.

#### 4.5.4 *Operational Risks*

Foreign lenders' concerns have been reduced by the convertibility of Argentina's exchange rate and the parity of its currency with the U.S. dollar.

Investors need to consider obtaining intellectual property rights protection. Patent law remains undeveloped and poorly enforced.

Those who visit Buenos Aires frequently report no special risks to safety and security of personnel engaged in work there.

ACTION AREA	FACTORS	INTENDED RESULTS
Arranging risk management regimes	<ul style="list-style-type: none"> <li>• Identifying team-based performance risks</li> <li>• Identifying project-based performance risks</li> <li>• Identifying and measuring national and local operating risks</li> <li>• Identifying global market risks</li> <li>• Arranging and costing risk insurance, management and hedging instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management plan</li> <li>• Costed insurance, management and hedging arrangements</li> <li>• Phased consortium contract among main participants based on above arrangements</li> </ul>

#### 4.6 Potential Next Steps

The next step in turning this document into an action plan for a prospective "city team" focused on Buenos Aires is to consult further with those already involved there or with an active interest in this country. The aim will be to determine whether there is an interest in coupling commercially-driven work on upgrading energy, water, and sewage treatment infrastructure, perhaps with World Bank financing, and perhaps using Public-Private Partnership arrangements, with expanded work on capacity-building in the field of environmental management and development.

In mid-November 1998, Natural Resources Canada is planning to lead a 10 day mission to Argentina, Chile and Peru to showcase Canadian industry expertise and technology in natural resource-related businesses and electrical power, equipment and services. This may provide opportunities for networking leading to more company interest in sustainable cities projects.

Turning to the question of forming a Buenos Aires city team, there would need to be formal engagement of prospective team members in:

- agreeing on main elements of a Buenos Aires city strategy and immediate actions flowing from it, such as positioning for contracts to develop mass transit, BOT for infrastructure and energy-efficient housing, operations management and design services, telecommunications planning, equipment and services, and advanced environmental technologies;

- confirming Buenos Aires city team members;
- agreeing on a focus/secretariat of the team, and modus operandi;
- determining the main elements of a business plan for entry and ongoing project support, together with funding sources over the life-cycle of a major project or program;
- agreeing on how to measure results over time.

ACTION AREA	FACTORS	INTENDED RESULTS
Determining specific first steps	<ul style="list-style-type: none"> <li>• Assessing the status of current contacts and projects</li> <li>• Determining how to manage partner expectations</li> <li>• Laying out a plan for entry and initial pilot projects or other specific actions</li> </ul>	<ul style="list-style-type: none"> <li>• Specific entry strategy and action plan</li> <li>• Results-based reporting system for participants</li> </ul>

## **5. TEMPLATE FOR HANOI, VIETNAM**

### **5.1 Setting Priorities Among the Opportunities**

Hanoi, the capital of Vietnam, has a population estimated at 3.5 million people, and has been growing rapidly. Recent economic reforms are expected to accelerate urban growth further, and populations of Hanoi and nearby Haiphong are expected to double by 2010, far beyond the capacity of current infrastructure to support them.

Industrial development and construction activities in cities are thought to be growing at 15-16% per year. Foreign investment -- which stood at zero just a few years ago -- now exceeds \$30 billion in commitments and around \$8 billion in actual inflows. As foreign investment accelerates, contrasts between the older lagging and environmentally-burdensome industrial sector and more technologically-sophisticated new industries are expected to be sharp.

As a result of combined urbanization and industrialization, demand for electrical power is projected to grow by at least 11.6% per year between now and 2010. The short term target is to add 3,000 megawatts to the existing capacity by 2000, at an estimated cost of US\$1-1.5 billion. Private and foreign-invested power plants constructed under build-operate-transfer (BOT) agreements will be encouraged to do this work. These investments present real opportunities for complementing conventional hydro-electric and other large-scale power sources with environment-friendly renewable energy, co-generation and energy conservation technologies. Such alternatives are both cheaper and more sustainable. The current Asian financial crisis is likely to create a favourable climate for lower-cost options that can be carried in many locations at once, rather than a few more vulnerable mega-projects.

Canadians could build on current excellent relations with national, provincial and municipal governments in the Hanoi and Haiphong region to develop immediately feasible community energy supply and conservation initiatives. They might begin with micro-cogeneration, low-head hydro, wave-mill, and similar tested options that reach well into the surrounding countryside. Complementing these efforts would be work to transfer building and industrial process energy and water conservation technologies, and energy from waste technologies that could be locally produced. While previous work has largely been in sanitation and water pollution control, this has less prospect of immediate financial returns than do energy options.

ACTION AREA	FACTORS	INTENDED RESULTS
Scoping, setting priorities among opportunities	<ul style="list-style-type: none"> <li>• Sustainable governance arrangements</li> <li>• Priority needs</li> <li>• Available financing</li> <li>• Match Canadian interests and capabilities</li> <li>• Meet competition from, beat, or partner with foreign competitors</li> </ul>	<ul style="list-style-type: none"> <li>• Ranked priorities among opportunities</li> <li>• Consensus on initial opportunity to be explored</li> <li>• Statement of action implications of chosen opportunity</li> </ul>

## 5.2 Defining the Range of Canadian Expertise and Capabilities

Total Canadian exports to Vietnam have risen from approximately \$12 million in 1993 to over \$50 million in 1997. Infrastructure-related exports totaled an estimated \$9 million in 1997. Over the same period, exports of telecommunications equipment grew by approximately \$4.6 million. Exports to Vietnam of machines and mechanical appliances, including parts, rose by some \$1.3 million.

In the field of technical cooperation, the International Development Research Centre (IDRC) is working on sampling and analysis to determine the impacts of contamination problems in Hanoi's urban waste water and food supply. It is also funding the University of Montreal in a socioeconomic study to improve shelter for the urban poor. The University of Montreal is also involved in other projects in Hanoi, one to develop partnerships for urban development, and others funded by CIDA.

Under contract to CIDA, Sodexen Incorporated of Montreal is working with the Environment Committee of Hanoi on a study of solid waste disposal systems and sanitation equipment needs.

SNC-Environmental has a project for environmental monitoring and planning, pollution management, impact assessment, and solid waste management.

Dessau International has experience in Asia and specifically in Vietnam. The company specializes in engineering, environmental and construction services.

Porter Dillon has experience in Vietnam and has comprehensive expertise in pollution and risk assessment, monitoring, prevention and conservation, as well as waste site remediation.

Queneco International Inc. has worked on repairing and maintaining ships in Vietnam. It also has capabilities in water and wastewater treatment technologies and in aquaculture treatment.

ACTION AREA	FACTORS	INTENDED RESULTS
Defining the range of needed Canadian expertise	<ul style="list-style-type: none"> <li>• Urban project planning and management</li> <li>• Capacity-building and training</li> <li>• Funding and financing</li> <li>• Risk management</li> <li>• Project implementation</li> <li>• Supply of specific products, technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed team list and contact information</li> <li>• Agreed protocols for reporting and accountability to team participants</li> <li>• Scenario for participation by team members over project life cycle</li> </ul>

### 5.3 Addressing Needs of Prospective Partners

Viet Nam has been changing from a centralized, largely controlled, socialist economy to one which is primarily market driven. The Vietnam Communist Party (VCP) has a president, Tran Duc Luong, and a new head of government, Prime Minister Phan Van Khai, who came to power in September 1997.

Despite the party's entrenchment, the VCP launched a process of market reform in 1986. Known in Vietnamese as "Doi Moi" ("renewal"), the process aims to restructure Vietnam's regulatory, legal, administrative, business, investment, and foreign trade policies to produce a market economy "with socialist characteristics" under state management. Reform helped decentralize economic decision-making, encouraged small-scale private enterprises and largely dismantled agricultural collectivization.

Vietnam can boast considerable progress in creating a legal framework for business. But as with its newly reformed judicial system, these laws are new, remaining largely unstructured and informal. The World Bank assessed the system as having overlapping authority between legislative and executive branches and inconsistent standards set out by multiple levels of government. This duplication often results in uncertainty and increased transaction costs.

There are a variety of Canadian contacts with the municipal government of Hanoi. These need to be tapped to develop a sense of how best to approach this government in the future, given the many environmental projects already underway in the city and region.

ACTION AREA	FACTORS	INTENDED RESULTS
Addressing needs and requirements of municipal authorities and local partners	<ul style="list-style-type: none"> <li>• Opening doors to cooperation</li> <li>• Defining needs cooperatively</li> <li>• Developing local focal points</li> <li>• Developing local capacities</li> <li>• Creating new ventures and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed statement of joint priorities</li> <li>• Agreed local partners and participants</li> <li>• Agreed action plans with local partners and participants, including local financial contributions and contributions in kind</li> <li>• Agreed reporting and accountability arrangements between partners</li> </ul>

#### 5.4 Securing Funding and Financing

CIDA is funding the following projects in Hanoi, including:

- a training session on real estate through the Corporation professionnelle des urbanites du Quebec, and the Institut d'urbanisme, University of Montreal;
- a project to improve Hanoi's governance, implemented by a consortium of Montreal and La Baie cities with the University of Montreal;
- a project through the Bureau de la recherche et de la coopération internationale, University of Sherbrooke to conduct a rural and urban environmental assessment of the Red River Delta;
- a training project focused on environmental and resource management through the Institute for Environmental Studies, University of Toronto.

On a wider front, Vietnamese demand for electrical power will grow by at least 11.6 per cent per year between now and 2010. The short term target is to add 3,000 megawatts to the existing capacity by 2000, at an estimated cost of US\$1-1.5 billion. Private and foreign-invested power plants constructed under build-operate-transfer (BOT) agreements will be encouraged. Plans for electric power development have been ratified by the country's Prime Minister and reflect investment opportunities for new power plants equipped with modern technology. Plans also call for major renovations to the 12 existing power sources, which generate a total of 4,400 MW annually, 67 per cent of which comes from hydroelectric plants.

These investments present real opportunities for complementing conventional power sources with environment-friendly renewable energy, co-generation and energy conservation technologies. Such alternatives are both potentially cheaper and more sustainable.

The building industry in Vietnam is a major area for new investment. Hanoi has gone from 382 international quality hotel rooms in 1994 to over 5,000 rooms in 1997. Growth projections for the year 2000 indicated a total of over 8,000 rooms available. As well, the supply of residential units in Hanoi has increased from 166 units in 1994 to 943 units in 1997. By the year 2000, Hanoi is expected to have a total supply of 3,000 units. This does not include the homes built by individual landowners, which is two or three times this number.

The World Bank has two substantial, infrastructure-focused projects currently in the pipeline for Hanoi including a project to rehabilitate the city's water supply for US\$98 million, and an institutional capacity building project worth US\$45 million to improve the efficiency and safety of Hanoi's urban transport systems.

Solid waste and wastewater management in Hanoi are top priorities of the government's Environment Committee. Both CIDA and IDRC have funded research into ways and means of dealing with the growing needs. A number of Canadian companies have completed environmental projects on various stages of waste management in Hanoi, from needs assessment to technology transfer.

A future area of growth will be the "New Cities" being developed outside of Hanoi and Ho Chi Minh City. Large projects planned for Hanoi include the \$40 billion Hanoi New Town and the \$2.1 billion Citra West Lake City. Daewoo Corporation is the developer of Hanoi New Town and has hired Bechtel Engineers to develop the master plan.

The West Lake project covers 350 hectares (865 acres) and involves relocating of over 3,000 people. Both projects are complete cities to be developed in phases over the next 20 years. The developers expect to begin the projects by late 1998.

ACTION AREA	FACTORS	INTENDED RESULTS
Securing funding and financing	<ul style="list-style-type: none"> <li>• Meeting program application and due diligence criteria</li> <li>• Developing business plans for potential investors and financiers</li> <li>• Developing a team marketing package</li> <li>• Determining administrative arrangements for funding and financing</li> <li>• Determining reporting arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Program applications</li> <li>• Business plans</li> <li>• Team marketing package</li> <li>• Agreed administrative arrangements</li> <li>• Agreed reporting and accountability arrangements</li> </ul>

## 5.5 Managing Risks Through Detailed Due Diligence

### 5.5.1 Overview

Foreign Direct Investment in Vietnam faces risks associated with corruption, "red tape" and the absence of clear private property rights. FDI fell by over 50 percent in 1997 and continues to decline as a result of East Asia's financial turmoil. Despite the crisis, Vietnam's new government appears committed to reform. Moody's gives Vietnam a rating of Ba3, and Standard and Poor's does not rate Vietnam.

### 5.5.2 Political Risks at a National Scale

Vietnam recently experienced some political instability because of its evolving system for succession. Fortunately, the Government managed to resolve its leadership dilemma with the selection of a new president and prime minister in 1997. The new leadership is supportive of reform. However, political risks now arise from lack of consensus regarding the pace and extent of economic reforms. Analysts predict that a replacement for the Communist Party's Secretary General will be someone pragmatic to maintain liberal economic policies without threatening its power base.

### 5.5.3 Economic and Financial Risks at a National Scale

The present Government remains inclined to protect state industries at the expense of competing foreign investments. Inflation should decline slightly, but policy uncertainties, ambivalence of foreign investors, and the heavy debt will retard economic growth, keeping it below the levels of recent years.

However, the economy will be sustained by increased oil production, foreign exchange receipts and foreign aid, improved infrastructure and increased efficiency as a result of less government control. The Government is unlikely to meet its goals of reducing inflation to 3% annually through 2000; or its target of 9% economic growth annually. The drag on economic improvement may be continuing state interference in the economy, including preservation of the state sector, and inefficiencies resulting from corruption, bureaucracy, and retention of a Marxist economic system. In this context, smaller-scale, locally-developed and controlled projects are likely to be far less risky than are large-scale or mega-projects.

International Financial Institutions (such as the World Bank and the International Monetary Fund) note that a worrisome amount of imports may be consumption goods, bought on credit. Also, the IMF estimates that as much as 70% of Foreign Direct Investment is debt, not equity. However, Vietnam's debt service payments are estimated at 16 percent of exports, well within a manageable range. The Vietnamese Government is under pressure from the IMF to make further progress with enterprise, banking sector and tax reforms before assistance in the amount of US\$120.8 million will be released. There is a strong interest in the Canadian system of intergovernmental transfer payments, and an apparent desire to increase the authorities and functions of municipalities. Such reforms may occur sooner in regions close to the capital, where there is trust in local authorities.

#### *5.5.4 Operational Risks*

As in most command economies and former Communist countries, there is a substantial amount of bureaucratic process involved in doing business in Vietnam. Bureaucracy in Vietnam is both vertical and horizontal. Authority is spread throughout divisions and/or departments. Hence, there is a tendency for peripheral interests to surface during negotiations.

The legal system is still developing and judicial enforcement can be inconsistent. Consequently, it may be difficult to recover losses if contractual obligations are not fulfilled. In addition, laws are changing rapidly. The interpretation of these laws is occasionally inconsistent and some regulations may be in conflict with others. The concept of a contract is new. There is some tendency for negotiations to begin with signing the contract, after which problems are revealed. Although not legally enforceable, Memorandums of Understanding (MOUs) are useful as these documents bring problems to light relatively early in the negotiation process.

Trade financing should be approached with caution. It is recommended that all new-to-market companies should use L/Cs for every transaction. Even after an extended period of time, foreign suppliers should not offer unsecured trade financing to local distributors or importers, even though everything looks right.

Canadian companies should be prepared for hidden costs. Labour rates in Vietnam may be low, but hidden cost can be high, such as rent, personal taxes, and telecommunication costs.

Highlighting the importance of personal connections in Vietnam, the best way to enter the market is to use the services of local agencies. These include local Vietnamese and international management consulting firms, law firms, and local accountants. These firms are likely to know the system and have the necessary connections to facilitate market entry. Companies should always insist on several references of past clients who have successfully completed transactions in Vietnam.

Those who visit Hanoi frequently report no special risks to safety and security of personnel engaged in work there.

ACTION AREA	FACTORS	INTENDED RESULTS
Arranging risk management regimes	<ul style="list-style-type: none"> <li>• Identifying team-based performance risks</li> <li>• Identifying project-based performance risks</li> <li>• Identifying and measuring national and local operating risks</li> <li>• Identifying global market risks</li> <li>• Arranging and costing risk insurance, management and hedging instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management plan</li> <li>• Costed insurance, management and hedging arrangements</li> <li>• Phased consortium contract among main participants based on above arrangements</li> </ul>

## 5.6 Potential Next Steps

The next step in turning this document into an action plan for a prospective "city team" focused on Hanoi is to consult further with those already involved there or with an active interest in this country. The aim will be to determine whether there is an interest in coupling work on energy conservation and alternative energy production with capacity-building and institutional strengthening work, and perhaps using Public-Private Partnership arrangements and IFI financing.

There would need to be:

- Agreement on the city strategy approach and focus of actions;
- Agreement on priorities for the main thrust of Canadian efforts, e.g.:
  - approaching the Vietnamese government to propose a multi-faceted PPI project to build power sources using alternative energy technologies, coupled with conservation efforts at a municipal level;
  - positioning for the Hanoi water supply and transport system service contracts with the World Bank, and partnering with CIDA and IDRC for projects in waste management;
  - marketing construction and infrastructure services to the principals developing the "New Cities" outside of Hanoi and Ho Chi Minh;
  - positioning for local government contracts for Canadian suppliers of "green" building products and services.
- Agreement on confirmed Hanoi city team members;
- Proposed focus/secretariat of the Canadian city team, and modus operandi;
- The main elements of a business plan for entry and ongoing project support, together with funding sources over the life-cycle of a major project or program;
- How to measure results over time;
- How to implement a Hanoi city team in practical terms.

ACTION AREA	FACTORS	INTENDED RESULTS
Determining specific first steps	<ul style="list-style-type: none"> <li>• Assessing the status of current contacts and projects</li> <li>• Determining how to manage partner expectations</li> <li>• Laying out a plan for entry and initial pilot projects or other specific actions</li> </ul>	<ul style="list-style-type: none"> <li>• Specific entry strategy and action plan</li> <li>• Results-based reporting system for participants</li> </ul>

## 6. TEMPLATE FOR KATOWICE, POLAND

### 6.1 Setting Priorities Among the Opportunities

The Katowice region is the heart of the largest and historically most important industrial region of Central Europe, and is dominated both physically and economically by its massive complex of coal mines, metallurgic and chemical industries, and other heavy industries. The region is a conurbation of fifteen adjoining cities, with a combined population of approximately 2.3 million, covering 1250 square kilometres. All are independent legal jurisdictions, but they formed an official Union of Municipalities in August 1994, in order to address the daunting urban environmental issues more effectively. Katowice accounts for 97.3% of Poland's mined coal, 19% of electricity sales and 55.2% of steel production. It produces 15% of national GDP with 10% of the Polish citizenry on 2% of the country's land mass. Residents tend to be more prosperous than in other parts of the country with lower than average unemployment rates and 21% higher than average national wages.

There are two main opportunities on the horizon: to expand, deepen, and accelerate the Canadian involvement in solid waste management and waste reduction through composting and recycling; or to pursue a vigorous initiative to help the region to consume less coal for basic energy needs. Both have substantial prospects of rather immediate financial and environmental returns. Of the two tracks, experts involved in the region appear to favour opening up the second, at least through small-scale pilot efforts, without in any way reducing the first. An "off-coal" energy initiative would have multiple environmental benefits, for local urban air quality as well as reduced greenhouse gas emissions. Starting points could include conversion of buses to natural gas, micro-cogeneration for apartment buildings, energy conservation in buildings, and renovation of district heating systems.

ACTION AREA	FACTORS	INTENDED RESULTS
Scoping, setting priorities among opportunities	<ul style="list-style-type: none"> <li>• Sustainable governance arrangements</li> <li>• Priority needs</li> <li>• Available financing</li> <li>• Match Canadian interests and capabilities</li> <li>• Meet competition from, beat, or partner with foreign competitors</li> </ul>	<ul style="list-style-type: none"> <li>• Ranked priorities among opportunities</li> <li>• Consensus on initial opportunity to be explored</li> <li>• Statement of action Implications of chosen opportunity</li> </ul>

## **6.2 Defining the Range of Canadian Expertise and Capabilities**

Total Canadian exports to Poland have risen from approximately \$80 million in 1993 to over \$135 million in 1997. Infrastructure related exports totalled \$20 million in 1997. Over the same period, exports of telecommunications equipment grew by a factor of approximately \$5 million. Parts and structures for buildings including mountings and fittings rose by approximately \$6 million.

Canadian activities in the region are already well established. The International Centre for Sustainable Cities (ICSC) based in Vancouver is leading the Sustainable Katowice Agglomeration Project which promotes infrastructure renewal in the region. ICSC currently has demonstration projects for developing a municipal garbage sorting and composting plant in the region, and improving the region's sewage sludge residue management. ICSC is coordinating a consortium of four firms to provide expertise to these pilot projects. This project and others in the region have received support from CIDA to supply Canadian technical expertise.

Canada is also active in the UNESCO program of the Sustainable Cities Initiative in Katowice through a consortium of the Centre for Urban and Community Studies, University of Toronto, and INRS - Urbanisation of Quebec.

In the City of Zabrze in Katowice Agglomeration, AGRA Earth and Environmental Ltd. worked on a feasibility study for a facility to process recyclable products and to compost municipal solid waste and sewage. The project is currently in the process of construction. The city is providing the site for the plant and making a substantial financial contribution. This project and others in the region have received support from CIDA to supply Canadian technical expertise.

Avalon Mechanical Consultants have experience in Poland and specialize in environmental policy, assessments, monitoring, and pollution auditing.

Diesel Controls manufactures air quality control equipment and has experience in over 100 countries, including Poland.

Geomatics International specializes in environmental analysis, designing Environmental Information Systems and Utility Information Systems for cities.

Wastewater Technology International Corporation has a joint venture agreement with Biala Przemysla Municipal Association to develop and operate water and waste water infrastructure.

WCI Waste Conversion established a Polish-Canadian joint venture company WCI Natol of Katowice to develop solid waste management and recycling plants.

ACTION AREA	FACTORS	INTENDED RESULTS
Defining the range of needed Canadian expertise	<ul style="list-style-type: none"> <li>• Urban project planning and management</li> <li>• Capacity-building and training</li> <li>• Funding and financing</li> <li>• Risk management</li> <li>• Project implementation</li> <li>• Supply of specific products, technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed team list and contact information</li> <li>• Agreed protocols for reporting and accountability to team participants</li> <li>• Scenario for participation by team members over project life cycle</li> </ul>

### 6.3 Addressing Needs of Prospective Partners

The evolution of municipal governance has benefited in recent years from the *Local Self-Government Act* of 1990, which transferred to over 2,400 municipalities the provision of a broad range of local infrastructure and services including water and sanitation, drainage, land development, urban streets, mass transit, and district heating. Given their new ownership of urban service assets, local governments have assumed responsibility to mobilize resources for operation, maintenance and expansion of these services.

While central authorities play a large role in the establishment of standards and policies for solid and toxic waste management, it is at the regional and local level that solid waste management projects are undertaken. The Province of Katowice, as with all others, runs a Department of Environmental Protection that is responsible for policy implementation. The department issues permits, collects fees, sets limits on pollution rates for all sources within a facility, and operates its own environmental funds.

Many Polish municipalities, including Katowice, are implementing broad-based pollution prevention strategies. Local officials in Katowice worked in cooperation with the Minister of Environmental Protection to produce a list of the most polluting industries which were subsequently ordered to reduce their emissions. The city also expanded its air quality monitoring system, now one of most extensive systems in Poland.

ACTION AREA	FACTORS	INTENDED RESULTS
Addressing needs and requirements of municipal authorities and local partners	<ul style="list-style-type: none"> <li>• Opening doors to cooperation</li> <li>• Defining needs cooperatively</li> <li>• Developing local focal points</li> <li>• Developing local capacities</li> <li>• Creating new ventures and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed statement of joint priorities</li> <li>• Agreed local partners and participants</li> <li>• Agreed action plans with local partners and participants, including local financial contributions and contributions in kind</li> <li>• Agreed reporting and accountability arrangements between partners</li> </ul>

#### 6.4 Securing Funding and Financing

Environmental protection relies on local government authorities and industry for the vast majority of technical and financial resources. However, external aid and technical know-how play a valuable supporting role. One key strategy here is to focus limited external resources within a framework of complementary activities, so that they are complementary to (not substitutes for) local efforts and thus help to achieve the greatest impact on local problems.

The environmental protection process in the Katowice agglomeration was able to build on and link into a number of related initiatives: the regional economic policy programme; the regional environmental project; the Silesia integrated risk management programme; the "Contract for Silesia"; and the PHARE-STRUDER economic reconversion and redevelopment programme.

Financing is available from the PHARE programme for projects aimed at the advancement of investment in the private sectors of countries across Eastern and Central Europe. Among the areas given highest priority are the: energy sector (energy efficiency), transportation (railways, air traffic, roads, ports), telecommunications, education, the development of civil administration, development of business, and privatisation.

The International Finance Corporation (IFC) manages the Polish Business Advisory Service (PBAS). Services range from preparation of business plans to accessing financing sources and information on marketing and management. With funding of \$15 million, PBAS has completed 185 projects, which generated or saved 3,000 jobs and a 10 percent investment in small and medium businesses.

The IFC recently approved commitments of US\$445 million on 24 large infrastructure projects involving foreign partners, mostly on projects based on privatization. IFC's involvement is critical to foreign investors because of IFC's political risk umbrella and generally limited sources of long-term finance available for major projects. The IFC has also committed significant resources (US\$100 - \$150 million) for several smaller infrastructure projects, especially in the power sector. Promoting these projects through policy dialogue with the Polish government is among the World Bank Group's most important tasks for supporting private-sector development.

World Bank projects in Poland cover a number of municipal infrastructure sectors. In 1994, the Katowice District Heating Enterprise was the recipient of US\$45 million in loans for a project to enhance energy conservation and efficiency in the district heating sector. In the same year, the Global Environmental Facility Fund and Norway provided financing in the amount of US\$1.0 million to promote coal-to-gas conversion in small and medium-size boilers and to improve the overall energy efficiency throughout the heat supply chain, as a means of reducing carbon dioxide emissions. Polish consumers also benefited from a US\$5 million grant by the Global Environmental Facility and private sector participants, which accelerated the introduction of compact florescent lamps into the Polish residential lighting market.

More recently, the World Bank proposed loans totalling US\$22.0 million to finance a program of long-term sub-loans issued by borrowing banks to municipalities and revenue-earning municipal service enterprises. The project, which began in June 1997, is designed as a pilot operation to demonstrate how term-financing of municipal investments at commercial terms can work.

Because Poland is now a member of OECD and the economy is on the up-swing, multinationals can now raise project financing and corporate loans from both foreign and local banks. The biggest local firms are also well serviced. More initiatives are needed to accelerate privatization and generate momentum in certain key sectors, such as steel and building infrastructure, which will require massive private capital to finance modernization and expansion needs.

ACTION AREA	FACTORS	INTENDED RESULTS
Securing funding and financing	<ul style="list-style-type: none"> <li>• Meeting program application and due diligence criteria</li> <li>• Developing business plans for potential investors and financiers</li> <li>• Developing a team marketing package</li> <li>• Determining administrative arrangements for funding and financing</li> <li>• Determining reporting arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Program applications</li> <li>• Business plans</li> <li>• Team marketing package</li> <li>• Agreed administrative arrangements</li> <li>• Agreed reporting and accountability arrangements</li> </ul>

## 6.5 Managing Risks Through Detailed Due Diligence

### 6.5.1 Overview

Poland is projected to be the lowest investment risk of the ten largest emerging markets in the world. In 1998, Standard and Poor's DRI ranked Poland on the basis of more than 50 variables including governmental policies, economic trends, domestic political and economic risk factors.

Nariman Behravesh, chief international economist for Standard and Poor's DRI notes that "A continued upswing in industrial output together with declining inflation, fuelled by a recent cut in interest rates, has strengthened Poland's economic outlook and raised its ranking to the least risky top ten emerging market for business investment today." In the medium to long-term, Poland's main risks surround ongoing efforts to reduce the fiscal deficit and to accelerate structural reforms. Moody's gave Poland a rating of Baa3, and Standard and Poor's gave it a BBB-

### 6.5.2 Political Risks at a National Level

Despite a good economic outlook, the government faces internal and external challenges as it seeks to maintain market reforms while also satisfying public demands for social spending. Labour pressures for increased wages will also challenge the stability of the government. The Freedom Union party which formed the coalition government with the Solidarity Election Action, will try to guide the government toward less expansionary fiscal policies.

Under a government of shared power, turmoil might intensify because of the strained relations between the president and the legislature. At the same time, improved economic conditions would keep any increases within tolerable bounds. The government will likely maintain the privatization effort and continue the country's movement toward integration with West Europe. However, the government is likely to show less consistency than its predecessor in pursuing closer political and economic ties with European countries.

### 6.5.3 *Economic and Financial Risks at a National Level*

Economic growth in 1997 was a robust 6.9 percent, making Poland one of the fastest-growing economies in the world and the leader among transition economies. The business climate is expected to remain attractive, as adjustments from austerity measures and market reforms are consolidated. Growth is fuelled primarily by domestic demand and by foreign and domestic investment. Inflation will remain in double digits at least in 1998 because of pre-election spending. According to the OECD, the main risk continues to be that the government will be slow to reduce the fiscal deficit and tackle structural problems, retarding economic growth over the long run.

Abundant foreign investment and aid flows are facilitating Poland's debt servicing and repayment. Despite this, Poland's deficit is expected to increase because of the burden of debt repayment and the country's heavy reliance on imports.

### 6.5.4 *Operational Risks*

Petty crime is common and increasing in some areas, particularly in and around public transportation. The larger cities have a more serious crime problem, especially Warsaw, with prevalent car thefts and break-ins, street crimes, and residential burglaries. Violent crime is rare but on the rise. A blackmarket in currency transactions also continues to exist. The Katowice region itself poses no unique risks to operational personnel, except for the effects of higher pollution levels on health.

ACTION AREA	FACTORS	INTENDED RESULTS
Arranging risk management regimes	<ul style="list-style-type: none"> <li>• Identifying team-based performance risks</li> <li>• Identifying project-based performance risks</li> <li>• Identifying and measuring national and local operating risks</li> <li>• Identifying global market risks</li> <li>• Arranging and costing risk insurance, management and hedging instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management plan</li> <li>• Costed insurance, management and hedging arrangements</li> <li>• Phased consortium contract among main participants based on above arrangements</li> </ul>

## 6.6 Potential Next Steps

The next step in turning this document into an action plan for a prospective "city team" focused on Katowice is to consult further with those already involved there or with an active interest in this country. The aim will be to determine whether there is an interest in coupling work on energy conservation and alternative energy production to help get the region off coal with capacity-building and institutional strengthening work, and perhaps using Public-Private Partnership arrangements and IFI financing.

There would need to be:

- Agreement on the city strategy approach and focus of actions;
- Agreement on priorities for Canadian efforts, e.g.:
  - focusing on alternatives to coal-fired local energy supply;
  - positioning for BOT infrastructure projects in wastewater management, solid waste disposal, and water and energy efficiency;
  - focusing on assistance through IFC and the EU's PHARE programme;
  - coordinating with UNESCO's program, the Sustainable Cities Initiative and local governmental officials.
- Confirmation of Katowice city team members;

- Agreement on a proposed focus/secretariat of the Canadian city team, and modus operandi;
- Agreement on main elements of a business plan for entry and ongoing project support, together with funding sources over the life-cycle of a major project or program;
- Agreement on how to measure results over time;
- Agreement on how to implement a Katowice city team in practical terms.

ACTION AREA	FACTORS	INTENDED RESULTS
Determining specific first steps	<ul style="list-style-type: none"> <li>• Assessing the status of current contacts and projects</li> <li>• Determining how to manage partner expectations</li> <li>• Laying out a plan for entry and initial pilot projects or other specific actions</li> </ul>	<ul style="list-style-type: none"> <li>• Specific entry strategy and action plan</li> <li>• Results-based reporting system for participants</li> </ul>

## **7. TEMPLATE FOR SANTIAGO, CHILE**

### **7.1 Setting Priorities Among the Opportunities**

Apart from New York, London, Los Angeles, Washington, Detroit and Mexico City, the Santiago region is one of the most important cities on the globe for fostering future Canadian economic relations. It is the decision-making centre for the Canada-Chile Free Trade Agreement, the main point of governmental contact for many Canadian mining investors, and a large and discerning urban market in its own right. Reflecting Chile's stable economic and political system, the Export Development Corporation offers foreign investment insurance with no restrictions, and will support the full range of trading terms. The Standard and Poor's Rating for the country is A-, and Moody's is Baa1. The country as a whole is among the highest ranking among developing economies for low corruption and ease of doing business.

Santiago's environmental needs are large, and while legislation is in place, the pace of investment in clean-up is slow. Canadians would do best to concentrate on urban pollution prevention in a number of key contexts which hold out the prospect of financing from savings: air pollution control through conversion to natural gas for vehicles and buildings, water treatment in the context of new development with resulting revenues, and energy-efficient building technology.

Industrial waste treatment requires both in-plant and prevention technologies, as well as remedial and site cleanup technologies. As regulations become more effective, there will also be a growing market for industrial pollution prevention through clean technologies and for conventional industrial pollution control, especially in tanneries and in food-processing plants.

A major Canadian selling point, apart from a competitive Canadian dollar and an 11% tariff advantage over the United States, is that Canadians have been working on sustainable solutions for Santiago for some time, notably through the "Sustainable Santiago" project of the Toronto-based International Council for Local Environmental Initiatives. In addition, Canada Mortgage and Housing Corporation is making significant inroads in transferring Canadian frame housing technologies to Chile, and this can become a focal point for sustainable infrastructure at a community scale as well.

The Chilean economy's sustained growth is driving a robust construction sector. Growing about 10 per cent in 1996, it is generating demand for wood products and pre-fabricated housing systems. As Chile's population is to reach 15.3 million by 2000 from its current level of 14.7 million, the demand for housing is high. An estimated 400,000 new housing units need to be built by that date, bringing total housing stock to nearly 4.4 million.

There is a need for: low- and moderate-cost housing; multiple-unit condominiums built with wood-frame construction (the greatest potential is in southern region); and low-cost concrete technologies and local materials for light building technologies.

ACTION AREA	FACTORS	INTENDED RESULTS
Scoping, setting priorities among opportunities	<ul style="list-style-type: none"> <li>• Sustainable governance arrangements</li> <li>• Priority needs</li> <li>• Available financing</li> <li>• Match Canadian interests and capabilities</li> <li>• Meet competition from, beat, or partner with foreign competitors</li> </ul>	<ul style="list-style-type: none"> <li>• Ranked priorities among opportunities</li> <li>• Consensus on initial opportunity to be explored</li> <li>• Statement of action implications of chosen opportunity</li> </ul>

## 7.2 Defining the Range of Canadian Expertise and Capabilities

Total Canadian exports to Chile have risen from approximately \$194 million in 1993 to over \$366 million in 1997. Infrastructure related exports totalled \$52 million in 1997. Exports of telecommunications equipment grew from approximately \$6 million in 1993, to \$26 million in 1996 and \$10.5 million in 1997. Parts and structures for buildings rose from \$92 thousand in 1993 to approximately \$3.7 million in 1997.

Exports were also particularly high in 1997 for parts of machines and mechanical appliances, at \$6.3 million, and for digital processing units, at \$6.2 million.

Canada has substantive involvement in Santiago, through both research and development initiatives including:

- IDRC project to promote pine timber in construction and conduct training in timber house construction;
- Centre for Urban and Community Studies, University of Toronto, as part of the Global Urban Research Initiative, to develop an urban research network;
- University of Regina, to conduct joint research in social studies and sustainable development with the Universidad de la Serena.
- CMHC technical training seminars and coordinated trade missions.

A major project through the International Centre for Local Environmental Initiatives (ICLEI) entitled, "Sustainable Santiago", for environmental technology transfer, pollution prevention programs and transportation management expertise; ICLEI also has a water conservation pilot project in Santiago.

Comité de solidarité de Trois-Rivières is supporting Canadian interns working in Santiago in urban development projects, architecture, communications, education, and community development initiatives.

Les Fonds de Solidarité and Celdex Technologies are developing a solid waste landfill for 13 municipalities in metropolitan Santiago.

In addition, there are a variety of specific private sector initiatives underway:

- Ecolo Odor Control Systems Worldwide is distributing Ecolo's products and services.
- Golder Associates Ltd. is opening an office in Santiago to provide environmental and engineering services in Chile.
- Waterloo Hydrogeologic Inc. has formed Waterloo Hydrogeologic Latino America - consulting services.
- Wintec EMC Energy Management Corporation and NS Power are implementing energy efficiency projects.
- Genesis Organic Inc. is planning to construct a waste management composting facility.
- M.G. Environmental is planning to build a wastewater treatment plant.
- Martec Liquid Products Ltd. is distributing "Fuel Clean" products.
- Loewen Windows is supplying energy-efficient windows to a condominium project in Santiago, as well as to builders and architects of the Santiago area.
- Pacific Homes is working on steel-frame housing exports to Chile.

ACTION AREA	FACTORS	INTENDED RESULTS
Defining the range of needed Canadian expertise	<ul style="list-style-type: none"> <li>• Urban project planning and management</li> <li>• Capacity-building and training</li> <li>• Funding and financing</li> <li>• Risk management</li> <li>• Project implementation</li> <li>• Supply of specific products, technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed team list and contact information</li> <li>• Agreed protocols for reporting and accountability to team participants</li> <li>• Scenario for participation by team members over project life cycle</li> </ul>

### 7.3 Addressing Needs of Prospective Partners

The Chilean government is actively responding to Santiago's environmental problems. The Special Commission for Pollution Prevention and Reduction in the Metropolitan Region (CEDRM), established in 1990, works with ministries when specific courses of action are recommended. The Commission sponsors studies, publishes air quality data, and has devised emergency measures to reduce pollution and exposure on "crisis" days, as well as creating a master plan of regulations for improving Santiago's environment. However, environmental regulations have tended to be enforced for only new firms.

The National Commission for the Protection of the Environment (CONAMA), is the official body charged with establishing environmental regulations. It completed the regulations for liquid wastes in 1997. Given a recently finished inventory of industries and their discharges, the regulations may be used to target polluting industries and to require control measures. Some technological services do exist for industrial wastewater treatment. However, regulation of industrial solid waste is minimal.

The Ministry of Health conducted a survey requiring industries and hospitals to report on their solid waste production. Unfortunately, while they have an obligation to report, no corresponding requirement exists to treat waste production.

The government also took measures to prevent a reoccurrence of the 1991 cholera outbreak including: a ban on vegetables grown with wastewater irrigation and restrictions on selling irrigated vegetables and fruits outside of Santiago; stepped-up water quality monitoring; chlorination of irrigation water in canals; a public information campaign about the risks of eating raw vegetables and a ban on serving raw vegetables in restaurants. These measures rely, however, on public cooperation and the political will to continue monitoring.

ACTION AREA	FACTORS	INTENDED RESULTS
Addressing needs and requirements of municipal authorities and local partners	<ul style="list-style-type: none"> <li>• Opening doors to cooperation</li> <li>• Defining needs cooperatively</li> <li>• Developing local focal points</li> <li>• Developing local capacities</li> <li>• Creating new ventures and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed statement of joint priorities</li> <li>• Agreed local partners and participants</li> <li>• Agreed action plans with local partners and participants, including local financial contributions and contributions in kind</li> <li>• Agreed reporting and accountability arrangements between partners</li> </ul>

## 7.4 Securing Funding and Financing

### 7.4.1 *Canadian Funding*

CIDA maintains very close partnership ties with Chile, particularly in institutional and industrial cooperation. Canada's initiatives in Chile are principally designed to support efforts to achieve sustainable development through long-term partnerships.

The Canada Fund for Local Initiatives supports projects responding to small-scale, local needs. Currently, the Canada Fund focuses on small projects providing economic, technical, educational and social development assistance. The Canada Fund is managed by the Canadian embassy and currently has an annual budget of \$250,000.

Chile benefits from a number of regional initiatives, including the Canadian Technology Transfer Project, which focuses on the countries of the Southern Cone, including Chile. Air quality is specifically targeted as a priority for municipal environmental assessment in Santiago, and as an area for action in the Sustainable Santiago Project. The Sustainable Santiago Project is a joint initiative of the International Council for Local Environmental Initiatives (ICLEI), the Municipality of Santiago and the Corporation for the Development of Santiago and is funded in part by the Canadian International Development Agency (CIDA) Southern Cone Technology Transfer Fund.

In mid-November 1998, Natural Resources Canada led a 10-day mission to Argentina, Chile and Peru to showcase Canadian industry expertise and technology in natural resource-related businesses and electrical power, equipment and services.

#### 7.4.2 *Local Financing*

Chile's total investment in water treatment plants was US\$ 168.2 million in 1996 and 1997, and will be US\$ 83.8 million between 1997 and 2000, and about US\$ 20 million annually after that. A 65% share of these amounts is expected to be invested in activated sludge equipment, with U.S. manufacturers supplying about 60% of the equipment. Imports are expected to cover 80% of total demand.

Prolonged under-investment in public sector goods and services has created a significant shortage of public-use infrastructure in Chile. In 1995, the government sent two innovative and comprehensive projects to Congress, aimed at increasing private participation in this type of infrastructure: the *Concessions Act* and the *Financing of Infrastructure Act*.

The *Concessions Act* provides guarantees and flexibility in financing to foreign and domestic agents interested in investing in infrastructure projects through concessions. The objective of the *Financing of Infrastructure Act* is to facilitate channelling of resources from institutional investors to infrastructure projects. This Act introduces important changes in the regulation of capital markets; authorizes new sources of financing for infrastructure, and grants greater investment margins.

Backed by enabling government policies, the private sector will take the lead in infrastructure development. Private companies are expected to meet almost all new investment requirements in telecommunications and energy and a major share in the remaining sectors. In the next six years, private investment in infrastructure should account for about \$13 billion, or more than 70 percent of required investment.

The Metropolitan Company Sanitary Works, EMOS (Empresa Metropolitana de Obras Sanitarias) is responsible for private sector activities in two main areas: investment, and maintenance, quality control and general services. Under the 1989 law on sanitary services, EMOS acquired concessions in drinking water production, drinking water distribution, sewerage collection and sewerage disposal.

Contracts for maintaining water distribution and sewerage networks often involve leak repairs, repairs to valves and fire hydrants and blockages in sewers and house connections. In addition, funding is available for tasks such as the replacement of pipes that have reached the end of their service life, for earthworks and road repair, and for rehabilitation. Maintenance contracts are renewed every 2 to 3 years through a system of public or private tendering.

### 7.4.3 *International Financing*

With successive fiscal surpluses, the country's overall debt burden is being held constant. Foreign investment was about US\$5 billion in 1996, about US\$3 billion of which was direct investment.

As a partner in financing Chile's development, the World Bank has concentrated on lending and technical assistance that addresses new approaches in human resources development and poverty alleviation, infrastructure development, and institutional strengthening. Environmental management and decentralizing of public sector functions have been focal points.

Within the World Bank Group, the International Finance Corporation (IFC) objective in Chile is involved in projects where it brings added value, such as "greenfield" projects, nontraditional industries, cross-border operations, large infrastructure projects requiring longer terms than those usually available, and projects with complex risk-mitigation provisions. The Corporation's gross commitments to Chilean companies over 1991-96 totalled about \$524 million.

IFC perceives future opportunities in asset securitization, particularly in connection with housing and infrastructure finance. The IFC has a private sector international capital project development initiative worth US \$30 million to upgrade Santiago's rail infrastructure.

ACTION AREA	FACTORS	INTENDED RESULTS
Securing funding and financing	<ul style="list-style-type: none"> <li>• Meeting program application and due diligence criteria</li> <li>• Developing business plans for potential investors and financiers</li> <li>• Developing a team marketing package</li> <li>• Determining administrative arrangements for funding and financing</li> <li>• Determining reporting arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Program applications</li> <li>• Business plans</li> <li>• Team marketing package</li> <li>• Agreed administrative arrangements</li> <li>• Agreed reporting and accountability arrangements</li> </ul>

## **7.5 Managing Risks Through Detailed Due Diligence**

### **7.5.1 Overview**

Although Chile is among the countries in Latin America hit hardest by the financial turmoil in Asia, medium to long term prospects are considered good for the country. Moody's gave Chile a Baa1 rating and Standard & Poor's rated it an A-. Chile's fiscal policy continues to be well managed, with the 1996 surplus of about 1 percent being maintained in 1997, and privatization continued. It has also been a leader in the efforts to create regional free markets and has already reduced its own trade barriers.

### **7.5.2 Political Risks at a National Level**

Under President Eduardo Frei Ruiz-Tagle, Chile is expected to remain politically and economically stable. This is forecasted to continue for the next five years. In spring of 1998, Gen. Augusto Pinochet stepped down from his position as commander in chief of the Chilean armed forces, an important step in the securing of Chilean democracy. President Frei is pursuing policies that enjoy the support of the right. Because of the disarray of the opposition and Frei's popularity, the political base for the current positive business environment appears firm.

### **7.5.3 Economic Risks at a National Level**

Economic growth is expected to slow slightly, but still remain robust. Despite the impressive amount of diversification, Chile's economic success depends on the price of copper, which accounts for about 30 percent of export earnings and 15 percent of government revenues. Chile's financial markets have particularly felt the negative turbulence in Asia. Exports to Asia account for about seven percent of Chile's GDP.<sup>1</sup>

Along with the slowing of economic growth, inflation will likely fall. Although capital inflows and rapid growth will contribute upward pressure on inflation, the overall rate is expected to decline because of tight government control over fiscal and monetary policy. Sustaining economic growth will depend on the continuation of high levels of foreign and domestic investment.

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<sup>1</sup> Export Development Corporation, *Guide to Country Risks and Opportunities*, March 1998, p. 40.

After years of steady increases, the national savings rate appears to be levelling off at around 26% of GDP, still well short of the levels attained by such rapidly growing countries as South Korea and Singapore. The country will therefore remain dependent on foreign borrowing and on investment in capital-intensive, extractive industries, chiefly copper and mining. The result will be upward pressure on the Chilean peso. Rises in the peso in 1995 and 1997 have already threatened growth in the traditional high-employment industries such as textiles and footwear, and will threaten the global competitiveness of other important exports, including fruit and wine.

#### 7.5.4 Operational Risks

In general, Chile has fewer safety problems than any other Latin America or third-world countries. However, in Santiago and other large cities, there is some risk of robbery, particularly in downtown areas on weekends and after dark.

ACTION AREA	FACTORS	INTENDED RESULTS
Arranging risk management regimes	<ul style="list-style-type: none"> <li>• Identifying team-based performance risks</li> <li>• Identifying project-based performance risks</li> <li>• Identifying and measuring national and local operating risks</li> <li>• Identifying global market risks</li> <li>• Arranging and costing risk insurance, management and hedging instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management plan</li> <li>• Costed insurance, management and hedging arrangements</li> <li>• Phased consortium contract among main participants based on above arrangements</li> </ul>

#### 7.6 Potential Next Steps

The next step in turning this document into an action plan for a city team focused on Santiago is to consult those already involved there, or with an active interest in this country in order to determine:

- Agreement on the city strategy approach and focus of actions;

- Agreement on priorities for Canadian efforts, e.g.:
  - approaching the Chilean government to obtain a multi-faceted PPI project for air emission control technologies, wastewater and industrial waste treatment technologies;
  - positioning for a major local government contract for Canadian suppliers of energy-efficient and low-cost housing products and technologies.
- Confirmation of Santiago city team members;
- Agreement on proposed focus/secretariat of the Canadian city team, and modus operandi;
- Agreement on main elements of a business plan for entry and ongoing project support, together with funding sources over the life-cycle of a major project or program;
- Agreement on how to measure results over time;
- Agreement on how to implement a city team in practical terms.

ACTION AREA	FACTORS	INTENDED RESULTS
Determining specific first steps	<ul style="list-style-type: none"> <li>• Assessing the status of current contacts and projects</li> <li>• Determining how to manage partner expectations</li> <li>• Laying out a plan for entry and initial pilot projects or other specific actions</li> </ul>	<ul style="list-style-type: none"> <li>• Specific entry strategy and action plan</li> <li>• Results-based reporting system for participants</li> </ul>

## **8. TEMPLATE FOR TIANJIN, CHINA**

### **8.1 Setting Priorities Among the Opportunities**

Tianjin Municipality is strategically located in the Greater Bohai Economic Region which offers a growing industrial and consumer market of over 350 million people. The region is only 90 minutes away from Beijing by motor vehicle along the recently completed expressway. Canadian companies have been active there for some time and have a good reputation for doing quality work. However, linking Canadian efforts to present a comprehensive package to local and provincial authorities, as well as to foreign-owned manufacturing enterprises, remains a challenge.

Tianjin is the third largest urban region in China after Shanghai and Beijing. It offers an excellent opportunity to link Canadian expertise in development-oriented site services with financing and technologies for upgraded urban infrastructure, particularly in what is called the "Coastal City", composed of three different districts. Tanggu is the most interesting district of the three, because it includes the largest coastal city. Also located within Tanggu district is the Port, administered by Tianjin municipality, and the Tianjin Economic and Technological Development Area (TEDA) -- a special economic development zone designed to attract foreign investment -- under its separate administration. TEDA is ranked as one of the fastest growing and best managed economic development zones in the country. Within the Tianjin municipal government, a Coastal City planning office oversees development planning for the region as a whole. A significant opportunity exists in the Beijing and Tianjin central governments' strategy to establish a sophisticated high technology corridor from Beijing through Tianjin to the Coastal City over the long term. TEDA, in particular, is seen as critical to this strategy.

Attracting investment to address the backlog of air pollution control, wastewater, energy and transport infrastructure problems in the Coastal City is a priority for local authorities. Current expectations are that most population and industrial growth in Tianjin Municipality will take place in TEDA and in the Port area, and other parts of the Coastal City. Of specific interest are: alternative energy sources for industry, e.g., cogeneration based on natural gas; waste-to-energy systems; industrial wastewater treatment with recovery of valuable materials and energy from effluents; energy efficiency in buildings; rapid transit; and renovation of the urban fabric. In comparison with many other regions of China, Tianjin has current and potential revenue sources to finance environmental upgrading. However, projects which pay for themselves, and which create local employment will obviously be given the highest priority by municipal authorities.

ACTION AREA	FACTORS	INTENDED RESULTS
Scoping, setting priorities among opportunities	<ul style="list-style-type: none"> <li>• Sustainable governance arrangements</li> <li>• Priority needs</li> <li>• Available financing</li> <li>• Match Canadian interests and capabilities</li> <li>• Meet competition from, beat, or partner with foreign competitors</li> </ul>	<ul style="list-style-type: none"> <li>• Ranked priorities among opportunities</li> <li>• Consensus on initial opportunity to be explored</li> <li>• Statement of action implications of chosen opportunity</li> </ul>

## 8.2 Defining the Range of Canadian Expertise and Capabilities

Total Canadian exports to China have risen from approximately \$1.5 billion in 1993 to over \$2 billion in 1997. Infrastructure related exports totalled almost \$239 million in 1997. Over the same period, there was a sharp rise in exports of transmission/reception apparatus and in telephonic switching apparatus, which grew by approximately \$11 million. Parts for electric motors and generators etc. also grew rapidly from \$62 thousand in 1993 to \$38.5 million in 1997.

Chreod Associates, Reid Crowther, City Formation International, A.G. Levinsohn Consultants Inc., and other Canadian consultants are involved in infrastructure and environmental planning and management improvement initiatives in Tianjin. In particular, Chreod has been involved in Tianjin for four years carrying out planning and feasibility studies for the Tianjin Municipal Government, TEDA and the World Bank.

The Federation of Canadian Municipalities has included Tianjin in its "China Open Cities Project", which is designed for municipal capacity building.

The Institute for Environmental Studies, University of Toronto has an environmental management program in Tianjin, focused on water resources.

SNC-Lavalin and Klohn-Crippen are developing an expressway and working on a proposed rapid transit system for Tianjin.

Barker McGarva Hart worked on a conceptual framework for local planners in Tianjin and is studying the impact of the expressway on the development as well as possible financial returns for builders of the expressway.

ACTION AREA	FACTORS	INTENDED RESULTS
Defining the range of needed Canadian expertise	<ul style="list-style-type: none"> <li>• Urban project planning and management</li> <li>• Capacity-building and training</li> <li>• Funding and financing</li> <li>• Risk management</li> <li>• Project implementation</li> <li>• Supply of specific products, technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed team list and contact information</li> <li>• Agreed protocols for reporting and accountability to team participants</li> <li>• Scenario for participation by team members over project life cycle</li> </ul>

### 8.3 Addressing Needs of Prospective Partners

Tianjin municipality has the status of a province. It is located in the middle of a region offering a growing industrial and consumer market of over 350 million people, and only 90 minutes from Beijing by motor vehicle along a recently completed expressway. Tianjin's infrastructure facilities and services compare quite well with other Chinese cities, in part due to rebuilding which took place after the 1976 earthquake.

Changes in China's central government bode well for future investment opportunities. With the death of Deng Xiaoping, the Chinese government has initiated the boldest economic reforms since China opened its doors to world in 1978. Political consensus has coalesced around support for president Jiang Zemin's planned economic reforms in the context of a "socialist-market economy". A significant driving force behind reforms is the new Prime Minister Zhu Rhongji who recently replaced Li Peng.

Zhu Rhongji reportedly has a passionate dislike of corruption and has focused reforms on levelling the playing field for honest, productive enterprises. Based on a survey of businesses active in China, Transparency International's corruption index gave China as a whole a low score of 2.88 out of 10 and ranks it just above Argentina and Vietnam.

Canadians familiar with Tianjin after working there for some time find it to have a slower and more conservative pace than do other large Chinese cities. They also find local authorities to be comparatively straight forward to deal with, and do not report requests for unexpected payments, etc. The key issue of governance in Tianjin appears to be the complexity of responsibilities and authorities in a multi-layered region.

According to the Export Development Corporation, the need for reform in China as a whole is pressing. The leadership realises that its main near-term challenge is maintain growth in real GDP at a level sufficient to at least prevent unemployment from worsening much further. Sustainable growth requires the retreat of the state from the economic sector. It is suggested that state-owned industry may have to shrink by two-thirds, with the loss of 70 million urban jobs. Moreover, some 200 million of the 800 million who currently live on the land will need to find jobs in the towns.

How reforms will affect Tianjin Municipality is difficult to say, although it may benefit from greater decision making authority than previously. The central Chinese government is no longer a monolith and does not have the leverage it once had. China's political apparatus is having trouble getting orders obeyed in localities and even collecting taxes due to it, notes the Economist.

There are examples in the past of central efforts to address development and environmental problems in the Tianjin region. As early as the mid-70s, the central government began cooperation with municipal governments on numerous studies and surveys to evaluate the region's ecology. The Chinese Academy of Sciences carried out environmental analysis to pinpoint sources of pollution in the region. In the 80s, authorities developed a monitoring system using remote sensing and incorporated protection of the environment as a planning objective.

Today Tianjin continues to maintain a fairly close working relationship to the state government as many Government of China bureaucrats spend time working at the municipal level in Tianjin. However, reform efforts have been less aggressive in the area than in other parts of China with a more conservative attitude toward reforms. Some would argue that the slow pace of reforms has created a relatively more orderly climate for investment.

ACTION AREA	FACTORS	INTENDED RESULTS
Addressing needs and requirements of municipal authorities and local partners	<ul style="list-style-type: none"> <li>• Opening doors to cooperation</li> <li>• Defining needs cooperatively</li> <li>• Developing local focal points</li> <li>• Developing local capacities</li> <li>• Creating new ventures and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed statement of joint priorities</li> <li>• Agreed local partners and participants</li> <li>• Agreed action plans with local partners and participants, including local financial contributions and contributions in kind</li> <li>• Agreed reporting and accountability arrangements between partners</li> </ul>

## 8.4 Securing Funding and Financing

### 8.4.1 *Canadian Funding*

CIDA was last involved in the Tianjin area in 1994 under a project to improve livestock quarantine facilities at the Port. The Tanggu Animal Quarantine Project was run by primarily by Agriculture Canada.

### 8.4.2 *Local Financing*

Municipal fiscal capacities remain weak in most cities, including those along the coast. As a result of a rapid decline in central government investment in local infrastructure over the past decade, and tight central controls over credit allocations, local governments are increasingly relying on extra-budgetary revenues and administrative direction to State Owned Enterprises (SOEs) to invest or borrow for infrastructure. Since local governments are not allowed to issue bonds, and local SOEs are not likely to obtain central approval for corporate bond issues ahead of State-level SOEs, investment capital formation is becoming an increasingly difficult challenge for municipalities.

Financing is a major challenge for Tianjin, which must make full use of foreign financing, expertise and managerial experience, if it is to modernise its infrastructure sector. In response to reductions in central government spending, a growing number of local governments, including Tianjin, are seeking to have non-state firms, particularly foreign investors, finance local infrastructure investments. The primary investment vehicles are concession contracts to cooperative and equity joint ventures, such as build-operate-transfer (BOT) agreements.

### 8.4.3 *National Financing*

Financing in China has to take into account the central government where much of the decision-making power still resides. Central government spending on Tianjin's infrastructure is likely to grow to meet the needs of expanding output in both heavy and light industry. Plans include a shift in allocation of resources to large-scale energy and transportation projects. The government also expects foreign investment to be a key factor in spurring growth.

China has not used BOT financing for any highway projects thus far, although there are five large projects waiting for approval from the State Planning Commission (SPC). These projects, located in Guangdong, Hubei, Fujian, Jiangsu and Tianjin, are expected to win approval by the latter half of 1998. The SPC is currently developing BOT framework legislation and regulations with a view to systematically channelling foreign direct investment into local infrastructure.

The Chinese government has conducted extensive environmental and infrastructure studies as to the potential of this type of arrangement. The World Bank has been developing a pilot BOT concession model (one of the aforementioned five projects, a bridge to be built across the Yangtze River near Wuhan in Hubei Province) usable for Chinese toll road projects

The Bank regards BOT as a good way to increase private investment in China's infrastructure as the Bank decreases its own support for such projects. China's growing enthusiasm for BOT contracts will most likely make more rewarding opportunities available to foreign investors. Bankers expect BOT to ease China's infrastructure investment bottleneck, and believe that the number of profitable projects will increase in coming years.

The Chinese government is financing a new Waste to Energy (WTE) project in Tianjin. The plant is expected to process about 420,000 tons of trash annually, creating 20 megawatts of power. Australia's Great Pacific Financial Group is heading the project consortium and is the first Western company to execute a WTE deal on China's mainland. The project is worth \$50 million and has a 25 year BOT agreement.

### 8.4.4 *International Financing*

China has been the World Bank's largest borrower since 1992. In FY97, \$2.8 billion of Bank funds went to China. The Bank's Country Assistance Strategy for China identifies four areas to focus on operationally: macroeconomic and structural reforms, removal of infrastructure bottlenecks, poverty alleviation, and environmental protection. Urban environmental issues are specified as important challenges relevant to the latter three focus areas.

The Bank's most recent assistance to Chinese policy-makers is its 1997 environmental study, *Clear Water, Blue Skies*, produced in close collaboration with China's National Environmental Protection Agency and the SPC.

Other studies include urban environmental management, the environmental impact of coal use, energy conservation, options in greenhouse gas emissions control, and biodiversity conservation. Based on the findings of these studies the Bank has channelled almost \$3 billion to improve air and water quality in urban centres nationwide and to other developments to improve the quality of life in China's cities.

In FY97, the largest share of World Bank support was directed to China's goal of alleviating major infrastructure bottlenecks. The Bank approved \$1.52 billion for five projects aimed at improving and expanding transport systems and power capacity. A World Bank project to facilitate inland transportation, including increasing efficiency at Tianjin Port is in the pipeline. The project is worth US \$100 million.

In the past few years, lending for environmental protection has become the fastest growing area of the World Bank's program in China. Lending to this sector in FY96 totalled \$720 million for four projects addressing industrial and commercial environmental problems and reforming environmental protection policies in the Yangtze Basin (Shanghai, Yunnan, Chongqing, and Hubei).

In 1997, the Hubei Urban Environmental Protection, Yunnan Environment, Second Shanghai Sewerage, and Chongqing Industrial Reform and Pollution Control Projects were approved, to address urban air and water pollution.

Other agencies and institutions have been increasingly involved in China's urban environment sector. For example, the Asian Development Bank (AsDB) has recently commenced lending in urban water resources, water supply and wastewater treatment in China. AsDB's Technical Assistance program has recently included considerable advisory work on urban environmental planning, infrastructure services cost recovery, and municipal finance.

Bilateral agencies, including Japan's Overseas Economic Cooperation Fund, Japanese International Cooperation Agency, British Department for International Development, Danish International Development Agency and CIDA have been providing financing and technical assistance on several urban environment initiatives.

The UNDP/UNCHS/World Bank's Urban Management Programme is currently seeking to support initiatives in individual cities in China on urban poverty, urban environmental management and participatory urban governance.

Both the International Finance Corporation and AsDB's Private Sector Group are actively pursuing equity and debt investments in urban infrastructure projects involving participation by non-state sector, particularly direct foreign investors.

ACTION AREA	FACTORS	INTENDED RESULTS
Securing funding and financing	<ul style="list-style-type: none"> <li>• Meeting program application and due diligence criteria</li> <li>• Developing business plans for potential investors and financiers</li> <li>• Developing a team marketing package</li> <li>• Determining administrative arrangements for funding and financing</li> <li>• Determining reporting arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Program applications</li> <li>• Business plans</li> <li>• Team marketing package</li> <li>• Agreed administrative arrangements</li> <li>• Agreed reporting and accountability arrangements</li> </ul>

## 8.5 Managing Risks Through Detailed Due Diligence

### 8.5.1 Overview

According to the 1998 Standard and Poor's DRI Country Risk Review, China ranks third riskiest among the top ten emerging markets in terms of risk after Indonesia and South Africa. The report notes that the "outlook for China... remains problematic largely because of a likely devaluation of the renminbi next year, a continued decline in the growth of exports because of falling demand in Asia overall and rising domestic deflation there." Moody's gave China a rating of A3, and Standard and Poor's gave it a BBB+.

### 8.5.2 Political Risks

Although the current Chinese government remains committed to reform efforts, analysts suggest the support for Communist Party leader Jiang Zemin could falter if confronted by a foreign policy reversal, political or financial unrest in Hong Kong, or economic difficulties.

Canada's Export Development Corporation is concerned that the government may lack the political resolve to implement meaningful enterprise and banking sector reform without an overhaul of the social safety net.

Structural reforms will likely lead to increasing numbers of displaced persons who represent a potential source of unrest. Unless growth is high enough to absorb the workers displaced, it could be difficult to sustain the social and political consensus necessary to carry the reforms through.

Political risks in Tianjin could be somewhat more lower than for China as a whole given the Province's relatively measured approach to economic reform and less dramatic population and economic growth as compared to other areas. The Tianjin Government supports city planning efforts and has been less opportunistic than other regions in developing the Municipality. Moreover, Tianjin's provincial status gives it legislative independence and fiscal powers not enjoyed by other cities, with the exception of Shanghai and Beijing. Power sharing with the state and decentralized decision making will improve the Municipality's ability to implement changes.

### 8.5.3 *Economic and Financial Risks*

As a result of expected moderate growth, the Government of China could face increasing demands, and possibly overt protest, for political liberalization and economic changes benefitting consumers. Despite these risks, officials favour continued gradual movement in the direction of economic liberalization. The climate for international business may also be affected by disagreements between the central and regional governments and by international political tensions.

China's overall prospects for economic growth depend critically and increasingly on the government's success in reforming the state-owned enterprise (SOE) sector and repairing the badly weakened financial position of banks. Many of the highly-indebted SOEs are effectively bankrupt and overburdened with redundant workers. Although the SOE sector accounts for less than 20 percent of GDP, it employs two-thirds of the urban labour force and provides essential social welfare functions for its work force.<sup>2</sup>

A sharp decline in contracted foreign direct investment in 1997 resulted in part from growing investor uncertainty about Asia's and China's economic outlook. Concerns about pervasive corruption and red tape have hindered development across China generally. However, there are opportunities for development in regions such as Tianjin, which continue to provide investors with relatively low risk opportunities.

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<sup>2</sup> *OECD Economic Outlook*, June 1998, p. 148.

#### 8.5.4 *Operational Risks*

Commercial risks in China depend on the sector of the city or the Chinese agency with whom a Canadian company is dealing. Getting paid for services can be a risk as it is in many countries. In the power business for example, one industry source said he thought "almost all Western developers" have power bills going unpaid.

Most companies had received similar explanations as to why their clients, the power grids, were not paying. "They tell us that they are gaining no revenues to pass on," said a Beijing-based power executive. Although most companies do not completely believe this, there may be little they can do except to keep providing the power, and hope.

Many are afraid to go public with their information out of fear they will anger the Chinese power authorities. Nevertheless in some cases, there are measures that can be taken, including the option of resorting to commercial courts.

The risks to operational personnel are minimal. The crime rate is still very low in China, but has increased recently in large cities. Theft is becoming more common, but violent crimes are very unusual.

#### **8.6 Potential Next Steps**

The next step in turning this document into an action plan for a city team focused on Tianjin is to consult those already there, or with an active interest in this country in order to determine:

- Agreement on the city strategy approach and focus of actions;
- Agreement on priorities for Canadian efforts, e.g.:
  - positioning for contracts in improving urban amenities, environmental technologies manufacturing, infrastructure and telecommunications development in Tanggu and in TEDA;
  - emphasizing capabilities to create structure and formulate capacity building programs;
  - coordinate with local government officials and World Bank funding for infrastructure bottlenecks and environmental management;

- Confirmation of Tianjin city team members;
- Agreement on a proposed focus/secretariat of the Canadian city team, and modus operandi;
- Agreement on the main elements of a business plan for entry and ongoing project support, together with funding sources over the life-cycle of a major project or program;
- Agreement on how to measure results over time;
- Agreement on how to implement a city team in practical terms.

ACTION AREA	FACTORS	INTENDED RESULTS
Determining specific first steps	<ul style="list-style-type: none"> <li>• Assessing the status of current contacts and projects</li> <li>• Determining how to manage partner expectations</li> <li>• Laying out a plan for entry and initial pilot projects or other specific actions</li> </ul>	<ul style="list-style-type: none"> <li>• Specific entry strategy and action plan</li> <li>• Results-based reporting system for participants</li> </ul>

## ANNEX: COMPARATIVE INDICATORS FOR COUNTRIES AND CITIES SELECTED

### POPULATION SIZE (Thousands):

COUNTRY	VALUE OF INDICATOR	YEAR
Ghana	18,857	1998
Argentina	36,123	1998
Vietnam	77,896	1998
Poland	38,664	1998
Chile	14,824	1998
China	1,255,091	1998

Source: World Resources Institute, *World Resources 1998-99*, "Size and Growth of Population and Labor Force, 1950-2050".

CITY	POPULATION	YEAR
Accra, Ghana	1,673,000	1995
Buenos Aires, Argentina	11,802,000	(1995)
Hanoi, Vietnam	1,236,000	(1995)
Katowice, Poland	2,219,000	(1995)
Santiago, Chile	4,891,000	(1995)
Tianjin, China	9,415,000	(1995)

Source: World Resources Institute, *World Resources 1998-99*, "Urban Characteristics, City Level, 1993".

**FUTURE POPULATION ESTIMATES (Thousands):**

COUNTRY	POPULATION	YEAR
Ghana	36,341	2025
Argentina	47,160	2025
Vietnam	110,107	2025
Poland	39,973	2025
Chile	19,548	2025
China	1,480,430	2025

Source: World Resources Institute, *World Resources 1998-99*, "Size and Growth of Population and Labor Force, 1950-2050".

CITY	VALUE OF INDICATOR	COMMENT
Accra, Ghana	3,469	2015
Buenos Aires, Argentina	13,856	2015
Hanoi, Vietnam	1,762	2015
Katowice, Poland	2,400	2015
Santiago, Chile	6,066	2015
Tianjin, China	13,530	2015

Source: World Resources Institute, *World Resources 1998-99*, "Urban Characteristics, City Level, 1993".

**POPULATION GROWTH RATE (Annual Percentage Rates):**

COUNTRY	RATE	YEARS
Ghana	2.8	(1995 - 2000)
Argentina	1.3	(1995 - 2000)
Vietnam	1.8	(1995 - 2000)
Poland	0.1	(1995 - 2000)
Chile	1.4	(1995 - 2000)
China	0.9	(1995 - 2000)

Source: World Resources Institute, *World Resources 1998-99*, "Size and Growth of Population and Labor Force, 1950-2050".

CITY	RATE	YEARS
Accra, Ghana	4.01	(1995 - 2005)
Buenos Aires, Argentina	0.69	(1995 - 2005)
Hanoi, Vietnam	2.84	(1995 - 2005)
Katowice, Poland	0.52	(1995 - 2005)
Santiago, Chile	1.28	(1995 - 2005)
Tianjin, China	2.73	(1995 - 2005)

Source: *Country / Regional / Urban Profiles*, Canadian International Development Agency, December 1996.

**URBAN POPULATION (As a Percentage of Total Population):**

COUNTRY	PERCENTAGE	YEAR
Ghana	35	(1993)
Argentina	88	(1993)
Vietnam	20	(1993)
Poland	64	(1994)
Chile	84	(1993)
China	29	(1993)

Source: *Country/Regional/Urban Profiles*, Canadian International Development Agency, December 1996.

**GROWTH RATE OF URBAN POPULATIONS (Annual Percentage):**

CITY	VALUE OF INDICATOR	COMMENT
Ghana	4.5	(1993 - 2000)
Argentina	1.5	(1993 - 2000)
Vietnam	3.5	(1993 - 2000)
Poland	0.93	(1995 - 2000)
Chile	1.6	(1993 - 2000)
China	3.8	(1993 - 2000)

Source: *Country / Regional / Urban Profiles*, Canadian International Development Agency, December 1996.

**URBAN ACCESS TO SAFE DRINKING WATER (Percentage):**

COUNTRY	VALUE OF INDICATOR	COMMENT
Ghana	70	(1990 - 1995)
Argentina	77	(1990 - 1995)
Vietnam	53	(1990 - 1995)
Poland	100	(1990)
Chile	94	(1990 - 1995)
China	97	(1990 - 1995)

Source: *Country/Regional/Urban Profiles*, Canadian International Development Agency, December 1996.

**URBAN ACCESS TO SANITATION SERVICES (Percentage):**

CITY	VALUE OF INDICATOR	COMMENT
Ghana	53	(1990 - 1995)
Argentina	73	(1990 - 1995)
Vietnam	47	(1990 - 1995)
Poland	100	(1990)
Chile	84	(1990 - 1995)
China	74	(1990 - 1995)

Source: *Country/Regional/Urban Profiles*, Canadian International Development Agency, December 1996.