

**PROJECT INFORMATION DOCUMENT (PID)  
CONCEPT STAGE**

Report No.: AB1830[OPCS1]

<b>Project Name</b>	China- Liaoning Medium Cities Infrastructure Project
<b>Region</b>	EAST ASIA AND PACIFIC
<b>Sector</b>	Sewerage (30%); Water supply (20%); Solid waste management (10%); Urban Transport (40%)
<b>Project ID</b>	P092618
<b>Borrower(s)</b>	PEOPLE'S REPUBLIC OF CHINA
<b>Implementing Agency</b>	
<b>Environment Category</b>	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD
<b>Date PID Prepared</b>	October 6, 2005
<b>Estimated Date of Appraisal Authorization</b>	May 1, 2006
<b>Estimated Date of Board Approval</b>	October 15, 2006

**1. Key development issues and rationale for Bank involvement**

**Revitalizing the Northeastern Region of China:** China has become an international symbol of economic growth and poverty alleviation. Much of this growth has been driven by China's integration into the global economy which, however, has drastically changed the regional comparative advantages within China. Particularly negatively impacted have been the provinces in the northeast of China--Heilongjiang, Jilin, and Liaoning, which used to be the country's major industrial center, but whose competitive position has been undermined by reliance on inefficient state-owned enterprises (SOEs), particularly in the heavy industry and mining sectors. The Northeast of China is often characterized as a "rust-belt," and there is a need for a major transition to recapture the strong economic performance of the past and reduce poverty.

The Northeast generally, and Liaoning in particular as the most urbanized province in China with an urbanization rate of 56%, is characterized by high levels of urban unemployment from SOE layoffs and closures, and urban fiscal pressures due to the SOE subsidy burden, welfare payments, etc. Although Liaoning has fared worse than China's other regions in terms of job creation and employment, economic growth in the province has been roughly in line with the national average over the last decade, and the province still ranks 8<sup>th</sup> in the country in terms of per capita income. This growth may provide Liaoning help Liaoning implement a revitalization strategy without sparking a social or fiscal crisis. Furthermore, Liaoning's endowment of a skilled labor force remains an important asset which can be the base of future growth in the appropriate social, fiscal, and investment climate. The central government, led by the State Council in conjunction with provincial governments, has launched an ambitious program to "revitalize" Northeast China, which includes initiatives to stimulate economic development including partially restructuring SOEs, supporting "pillar" industries, providing social support for displaced workers, and investing in infrastructure.

**Role of the World Bank:** The World Bank has been Liaoning's development partner for over fifteen years, and has provided around US\$400 million for four urban infrastructure projects

alone. As part of the ‘Northeast revitalization strategy’ China has asked the World Bank for continued policy advice and further infrastructure investment financing. Ongoing World Bank analytical work to help inform the government’s policies include: i) Northeast China Development Strategy; ii) Sub-national Finance in Northeast China; and iii) Northeast China Investment Climate Study. Good infrastructure services provide part of the enabling environment for growth, but eventual solutions to Liaoning’s economic challenges depend primarily on improvements in the overall economic climate, such as improving the investment climate, optimizing fiscal policies, and providing adequate social programs such as unemployment insurance and retraining.

The medium-sized cities in Liaoning are especially vulnerable during the transition period. Many of the cities are reliant on large, inefficient SOEs focusing on single industries, and in general growth in these cities has been lower than the major cities of Shenyang and Dalian. Urban infrastructure funding for the medium-sized cities of Liaoning, on a per-capita basis, is generally half that of Shenyang and Dalian. Bank financed infrastructure investments can play an important role in supporting the cities to renew their existing asset base and promote institutional reforms to improve efficiency of service delivery. The provincial government has requested Bank support for urban environment, transportation, and heating sectors in such medium-sized cities, and the Government of China has programmed a series of Bank urban investment projects in the coming years. The proposed Liaoning Medium Cities Infrastructure Project (LMC) deals with urban environment and transport, while a heating project is under preparation for FY08.

**Renewing Urban Infrastructure:** The accumulated under-funding of urban infrastructure in the medium-sized cities in Liaoning has resulted in a serious deterioration of the asset base, and the neglect of basic sanitation and transportation facilities. Much of the existing road and water supply infrastructure in medium-sized cities is old and urgently in need of renovation. The water supply systems in some cities were originally constructed about 75 years ago, and much of the infrastructure constructed in the period from 1950-1990 was of low quality. Most cities are just beginning to develop their wastewater and solid waste facilities, and the general sanitation conditions in the medium-sized towns are less than satisfactory. The secondary road system, essential for ‘last mile’ access and to provide alternative routes to major arterials for bicycle traffic which is the mainstay of much of the population, is in a particularly bad state of repair. In the absence of an effort to systematically preserve, rehabilitate and manage the infrastructure, the livability of the cities will decline and infrastructure quality may constrain economic growth prospects.

**Promoting Sector Innovations:** Infrastructure sustainability will depend on developing political commitment and regulatory regimes to create the proper incentives and accountability mechanisms. The proposed LMC project will work with municipal and provincial government agencies to develop utility price and service regulatory regimes at both the municipal and provincial level, including performance monitoring, benchmarking, improving the tariff-setting process, etc. This will help ensure comprehensive and cost-effective delivery of infrastructure services such as water supply, wastewater, solid waste, public transportation, etc. In the environment sector, the Bank has worked with some cities to transform drainage departments into “wastewater companies” and promoting wastewater tariff increases. Experience has shown that the form service delivery: public department, public company, or private sector, is not as

important as creating the proper governance structures. Some cities have turned to the private sector to finance, build, and operate wastewater treatment plants and municipal landfills, but unfortunately *some* of these efforts have failed or not achieved the desired results. It is envisioned that the Bank will work with one or two subprojects to develop some form of public-private partnership, such as management contract, design-build-operate, or build-operate-transfer (BOT), as a demonstration project for the province. In the transport sector, the new National Road Safety law offers provides an ideal multi-organization platform to institutionalize good road safety related practice. The proposed project will work with city and provincial governments to develop ongoing monitoring, enforcement and education practices to effectively implement the new Road Safety law. The project will also support project cities to upgrade the road maintenance planning and implementation practices so that they can make optimal use of maintenance budgets.

**Reducing Water Pollution:** The previous two urban environment projects, the Liaoning Environment Project (1995-2001) and the Liao River Basin Project (LRBP, 2002-ongoing) focused on *water pollution control efforts* in selected cities. LRBP investments were guided by the “Liao River Basin Plan” which was prepared by the province with assistance from the European Union in coordination with the World Bank. One of the major objectives of the Plan is to reduce pollution into the Bohai Sea, which has a unique shallow marine eco-system and rich coastal wetlands which provide reproduction and nursery grounds for fish, shrimp, crab, and migratory birds. The Bohai Sea is also the most important center of shellfish aquaculture in China. The proposed Liaoning Medium Cities Infrastructure Project (LMC) will provide further support to efforts to clean up the Liao River Basin and the Bohai Sea. The World Bank is working with Liaoning Province to prepare a US\$5.0 million Global Environment Facility (GEF) grant to pilot innovative water pollution control activities associated with LMC under the “GEF-World Bank Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia.” This project extends the coverage of the LBRP wastewater component and initiates Bank involvement in the water supply and solid waste sectors.

**Improving Transportation:** The on-going “Liaoning Urban Transportation Project” supports Shenyang, Fushun and Anshan to develop a *comprehensive approach to urban transport* including construction of missing links in the road network, improved road maintenance and traffic management practices, and improved delivery of public transport services. A key lesson from LUTP implementation has been the city’s inability to effectively manage conflicts on the major arterial system due to a reluctance to reduce the level of service for automobiles. In response a major focus of the proposed project, which follows a similar comprehensive approach extended to three new cities, is on improving the secondary road network to reduce the load and conflicts on the major arterial system, and increase the level of public participation in the project preparation and implementation process. Public participation should help make planners and decision-makers more sensitive to the needs of the majority non-auto using population.

## **2. Proposed objective(s)**

The overall development objective of the proposed Liaoning Medium Cities Urban Infrastructure Project is to support selected medium-sized cities during a period of economic transition by renewing and enhancing the efficiency of existing infrastructure assets.

The objectives of the urban environment part of the project are to reduce water pollution in the Liao River Basin and Bohai Sea, increase water use efficiency, improve solid waste management, and enhance utility operational and financial performance. The objectives of the urban transport part are to relieve existing transportation bottlenecks, improve the quality of the overall transportation network, and build capacity for urban transport planning and implementation in a fiscally, socially, and environmentally sustainable manner. The project will also aim to improve municipal financial management, utility regulation, and develop models for public-private partnerships.

### **3. Preliminary description**

Part 1: Urban Environment: Components include:

*A. Water Pollution Control Infrastructure:* Construction of new and rehabilitated wastewater collection systems, treatment plants, and water reuse facilities in the following cities: Fushun, Tieling, Yingkou, and Panjin.

*B. Water Supply Infrastructure):* Rehabilitation of water distribution systems and upgrading of water treatment plants in the following cities: Fushun, Liaoyang, Anshan, Haicheng, Xincheng, and Tieling.

*C. Solid Waste Management Infrastructure:* Development of solid waste collection, transfer, and landfill facilities in the following cities: Fushun, Liaoyang, Xincheng, Yingkou, Huludao, and Panjin. The component also includes closures of existing landfills that pose environmental risks.

*D. Urban Environment Capacity-Building):* Technical assistance will be provided for the following activities: a) design review and advisory Services; b) Fushun water supply master plan; iii) pilot pollution control projects and d) small city environmental planning and feasibility study preparation.

Part 2: Urban Transport: Project cities include Fushun, Liaoyang, Panjin, and Jinzhou with the following components:

*A. Road infrastructure investment:* targets (a) primarily reconstruction (some widening, provision of drainage and street light facilities) to the arterial road networks of the participating cities; (b) construction of a selected number of new roads to relieve bottlenecks; (c) roads to support the Nanzhan new development in Jinzhou and a small urban expansion in Gongchanglin town of Liaoyang; and (d) associated resettlement..

*B. Secondary road improvement and maintenance:* targets improvements in the secondary road networks of the project cities to (i) relieve the pressure of local traffic off the major road network, and to (ii) enhance 'last mile' access for pedestrians and bicyclists.

*C. Traffic management and safety* focuses on supporting the implementation of the road safety law with enhanced traffic management monitoring and control systems and investments in traffic

management equipment (traffic signals etc.) and intersection improvements (junction channelization etc.) to improvement traffic flow and safety.

*D. Public transport* that includes provision of bus priority facilities and improvements in public transport planning and operations; and

*E. Transportation Capacity Building:* transport planning practices, safety monitoring and policy, traffic management practices, road maintenance planning and implementation practices, and public transport planning and reform to promote provision of bus services by the non-government sector.

### Part 3: Municipal and Utility Institutional Development:

*A. Municipal Financial Management Capacity Building* to support improvements in capital planning, debt management, financing approaches, etc. The activities will target the LMC cities in partnership with provincial government, and will build upon on-going Bank analytical work on this issue.

*B. Utility Capacity Building and Regulation* to improve the management capacities of water, wastewater, and solid waste utilities, and develop the provincial level price and service regulatory oversight system and capabilities. The activities will target the LMC cities in partnership with provincial government.

#### **4. Safeguard policies that might apply**

Safeguard Policies	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	X		
Natural Habitats (OP/BP 4.04)			tbd
Forests (OP/BP 4.36)		X	
Pest Management (OP 4.09)		X	
Cultural Property (OPN 11.03)			tbd
Indigenous Peoples (OD 4.20)			tbd
Involuntary Resettlement (OP/BP 4.12)	X		
Safety of Dams (OP/BP 4.37)			tbd
Projects on International Waterways (OP/BP 7.50)		X	
Projects in Disputed Areas (OP/BP 7.60)		X	

#### **5. Tentative financing**

Source:	(\$m.)
BORROWER	250
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	250
Total	500

#### **6. Contact point**

Contact: Greg J. Browder  
Title: Sr Water Resources Spec.  
Tel: (202) 473-0339  
Fax: (202) 614-0927  
Email: [gbrowder@worldbank.org](mailto:gbrowder@worldbank.org)