



1. Project Data:		Date Posted : 08/01/2000	
PROJ ID: P003564		Appraisal	Actual
Project Name: Beijing Environment	Project Costs (US\$M)	298.7	423.1
Country: China	Loan/Credit (US\$M)	125.0	119.4
Sector(s): Environmental Institutions	Cofinancing (US\$M)		
L/C Number: C2312; L3415			
	Board Approval (FY)		91
Partners involved :	Closing Date	06/30/1997	06/30/1999
Prepared by :	Reviewed by :	Group Manager :	Group:

2. Project Objectives and Components

a. Objectives
The objectives of the project were (i) to assist the Beijing Municipal Government (BMG) to improve its environmental planning and management capabilities, and (ii) to plan and carry out specific pollution abatement investments. Project activities were designed to demonstrate: (a) cost effective interventions to reduce pollution, (b) improved investment planning, (c) more effective regulatory control, (d) the efficient operation and maintenance of pollution control facilities, and (e) methods to recover costs from users.

b. Components
The project components included (i) technical assistance for studies to develop a long-term environmental master plan for Beijing and capacity building for BMG, and (ii) specific investments in district heating, industrial pollution control, sewerage, solid waste management, and hazardous waste management.

c. Comments on Project Cost, Financing and Dates
The IBRD Loan of \$45 million and the IDA Credit of SDR 60.1 million (\$80 million equivalent) were supplemented by a Japan Grant Facility grant for \$1.6 million. Actual project costs were 42% higher than at appraisal, mainly due to the escalation of local cost of civil works. The project closed two years later than planned at appraisal, mainly due to delays in resettlement and compliance with financial covenants. At the time of closing, \$9.5 million of the loan and SDR 1.0 million (equivalent to \$1.3 million) of the credit remained undisbursed. These amounts were cancelled after reconciliation of special account balances in July, 2000.

3. Achievement of Relevant Objectives:
The project substantially achieved its objectives:
(i) The BMG's environmental management capacity was improved through preparation of environmental master plan studies and the strengthening of the monitoring, analysis and planning capabilities of the Beijing Environmental Protection Bureau (BMEPB), and the enhancement of the technical competency of the Beijing District Heating Company and the Beijing Drainage Company (BDC).
(ii) successful implementation of specific investments in district heating, industrial pollution control, sewerage, solid waste management, and a hazardous waste management study.

4. Significant Outcomes/Impacts:
(i) the credit and the grant financed a set of environmental master plan studies, some of whose results were incorporated in Beijing's 9th Five-Year Plan for 1996-2000, (ii) the project financed equipment for air and water quality monitoring as part of the expanding environmental monitoring system of BMEPB, (iii) the Beijing Drainage Company was converted from a BMG division to a state enterprise that operates part of the sewerage system, (iv) the coverage of the Beijing interconnected district heating system was almost doubled, (v) the Beijing sewerage system was expanded by 25.3 kilometers of trunk sewers and interceptors, (vi) Beijing's first sanitary landfill was constructed and is considered as best practice in China, and (vii) several major polluting plants were brought into compliance or moved out of the city.

5. Significant Shortcomings (including non-compliance with safeguard policies):
The institutional development impact of the project was limited by the technical and institutional complexity of the project, which did not allow the Bank to provide critical in -depth review and assistance necessary for major advances in the regulatory framework for the environment. As a result, many recommendations from the environmental master

plan studies have not been incorporated in Beijing's urban master plan, nor have they been updated systematically . Beijing's overall environmental conditions did not improve, since the pollution abatement under the project was overwhelmed by the increases in pollution resulting from the rapid growth in population and the economy . The nine industrial pollution control subprojects were selected on the basis of a mix of environmental, commercial and social objectives, with weak accountability . Partly as a result, at least three subprojects are currently unused or underutilized. These three and an additional four are in serious arrears, putting a heavy fiscal burden on the BMG . Finally, the cost-effectiveness of these publicly-sponsored industrial credits was low in terms of pollution control efficacy, and in terms of the demonstration effect .

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
Outcome :	Satisfactory	Moderately Satisfactory	The project achieved most of its objectives, but the institutional components were of modest relevance, and some investment components had significant shortcomings,
Institutional Dev .:	Modest	Modest	
Sustainability :	Likely	Likely	
Bank Performance :	Satisfactory	Satisfactory	Quality at entry was only moderately satisfactory, since project lacked a clear framework for improving overall environmental conditions.
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR :		Satisfactory	

NOTE: ICR rating values flagged with '*' don't comply with OP/BP 13.55, but are listed for completeness.

7. Lessons of Broad Applicability:

The institutional and technical complexity of the project limited the Bank's ability to provide critical assistance for major improvements in the environmental management and regulatory framework . If more attention had paid to strengthening the regulatory framework, the environmental authorities would have had a better chance of improving Beijing's environmental conditions, rather than being overwhelmed by them .

The project's experience with the industrial pollution control credit line points to the lesson that industrial pollution can most effectively be addressed with strictly market-based financing focusing on commercial viability, combined with strong environmental regulations .

8. Assessment Recommended? Yes No

9. Comments on Quality of ICR:

The ICR provides a candid and comprehensive analysis of the project's experience . Overall, the ICR is satisfactory, but its quality could have been improved with (i) a clearer explanation of the factors underlying the 42% overrun of total project costs, (ii) follow-up and discussion of the environmental improvement monitoring targets defined at appraisal, taking advantage of the results of the monitoring equipment and capabilities financed under the project, (iii) a discussion of the manner in which the resettlement of the 1,870 households estimated at appraisal was undertaken and monitored for compliance with the Bank's policy . Finally, it would have been useful for the ICR to have been completed in time to have explicitly helped the design and decisionmaking on the follow-up project, which was approved in June, 2000.