

Report Number: ICRR10044

1. Project Data:

OEDID: L3413

Project ID: P004164

Project Name: Gas System Expansion

Country: Korea

Sector: Oil & Gas Transportation

L/C Number: Loan 3413-KO

Partners involved:

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Reviewed by: Hernan Levy

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#### 2. Project Objectives, Financing, Costs and Components:

The project, supported by a loan of US\$ 100 million was approved in FY92 and closed as scheduled in FY97. A total of US\$19.3 million was canceled. The actual project cost was US\$679 million, 7% less than appraised. The stated objectives of the project were to (a) provide additional infrastructure for the import of LNG to reduce the country 's reliance on coal and oil and thereby improve air quality in urban areas; and (b) strengthen Korean Gas Corporation's (KGC) financial management capabilities. The project comprised extension of an LNG import terminal, construction of 2 LNG storage tanks and gas transmission pipelines. KGC's objective in borrowing from the Bank was to extend the maturity of its mainly short-term debt and to improve its international creditworthiness.

## 3. Achievement of Relevant Objectives:

The project was completed under budget and ahead of schedule even though project scope was expanded to encompass three LNG storage tanks. LNG use in Korea increased almost four-fold between 1991-96 and its share of total energy consumption doubled to over 7%. On the other hand, very little was done to strengthen KGC's financial planning and management. KGC was able to access cheaper funds through issuing corporate bonds in its own name in 1994 and cut back on the use of the IBRD loan as a result.

## 4. Significant Achievements:

The project made a substantial contribution to reducing air pollution in urban areas. KGC estimates that the use of 7 million tons/year of LNG has reduced the emissions of SO2 and particulate matter by 80,000 tons and 14,000 tons respectively since 1995. Use of LNG instead of coal and oil has also cut CO2 emissions.

## 5. Significant Shortcomings:

Despite the explicitly stated objective, the project scope did not include an institutional development component . The Bank merely required the preparation of an Action Program for strengthening KGC 's financial staff, which was prepared but not implemented. Safety audits of KGC's installations, required under the loan agreement, were only partially completed and their findings were not provided to the Bank in a timely manner, thereby denying the Bank the opportunity to review and comment at appropriate stages of the project . GOK and KGC merely viewed the project as a way of tapping long-term funding and were not committed to the project's (narrow) institutional objectives.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments			
Outcome:	Satisfactory	Satisfactory				
Institutional Dev .:	Partial	Negligible	No evidence of even partial achievement of ID objective and no specific ID component was included in project scope.			
Sustainability:	Likely	Likely				
Bank Performance :	Satisfactory	Satisfactory				
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Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR:		Satisfactory	

7. Lessons of Broad Applicability: Whenever possible each stated objective should be accompanied by a project component and an implementation plan with monitoring indicators. The absence of such a explicit linkage may have accounted for the failure of the institutional objective of this project.

8. Audit Recommended?	_	Yes (	Œ	No
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# 9. Comments on Quality of ICR:

The ICR is of generally good quality and candid in its discussion of the project 's shortcomings. However, the ICR could have contained a more explicit discussion of the weak rationale for Bank lending to the project.