PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: AB1114

Project Name	Domestic Gas Sector Restructuring
Region	EAST ASIA AND PACIFIC
Sector	Oil and gas (100%)
Project ID	P077175
Borrower(s)	REPUBLIC OF INDONESIA
Implementing Agency	PT Perusahaan Gas Negara (Persero) Tbk
Environment Category	[X] A [ ] B [ ] C [ ] FI [ ] TBD (to be determined)
Safeguard Classification	[ ] S_1 [ ] S_2 [ ] S_3 [ ] S_F [ ] TBD (to be determined)
Date PID Prepared	September 15, 2004
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Date of Board Approval	February 8, 2005

1. Country and Sector Background

1.1. Indonesia's proved reserves of natural gas, estimated at about 2.56 trillion cubic meters (about 90.3 trillion cubic feet), are among the largest in the region. In 2003, gas production amounted to 72.6 billion cubic meter (2.5 trillion cubic feet), of which 33.4 billion cubic meter (1.39 trillion cubic feet) or 54.3 percent of the total production was exported mainly to countries in the region. However, domestic gas consumption is among the lowest in the region. In the hydrocarbon sector, the old prevailing laws and regulations sanctioned PT Pertamina's (Persero) and PT Perusahaan Gas Negara (Persero) Tbk *(*PGN)'s dominance in the sector, and allowed the government to interfere in the sector in ways that inhibited efficient operation and limited participation of the private sector. Many of the issues the sector faced under the previous inadequate legislative framework governing the energy sector have been addressed by the now legal framework. The 2001 Oil and Gas Law and the 2004 implementation rules and regulations created an environment conducive to removing the barriers to competition, private sector entry and development of the gas sector. However, the sector is still facing the following interrelated issues hampering the rapid development of a domestic gas market:

- *The structure of gas pricing in Indonesia is distorted and results in inefficient resources allocation*: The price of natural gas in the domestic market is below its economic/market value reducing producers' interest in developing this abundant resource for domestic use. The negative economic impact of this inadequate pricing system is compounded by the subsidized prices of petroleum products.
- *The implementation of the new Oil and Gas Law is proceeding slowly because of delayed issuance of the implementation regulations*: The law has provided the key elements for a progressive liberalization of the gas market. However, progress in its implementation has been slow because of delay in issuing implementing rules and regulations. The Bank engaged the Government on this pressing issue and the implementation regulations were enacted on October 18, 2004 paving the way for effective implementation of the law.

- *PGN is not fully prepared to operate in the emerging competitive gas market*: Under the new Oil and Gas Law, the three major segments of the oil and gas industry (production, transmission and distribution) will be unbundled, open access to network services will be allowed and eventually, a competitive gas market will be developed. To face these challenges, PGN is planning for: (a) further restructuring including strategic partnership with private sector to increasingly meet new investment requirements from its financial resources and standings, a major objective assigned to it by the Government; and (b) strengthening its management and operational practices and corporate governance to be ready to operate in the future competitive market.

- *Production Sharing Contracts (PSCs) are not conducive to gas development:* Over 90 percent of Indonesia's oil and gas is produced by the private sector, mostly by international oil companies. Private sector investment in the sector is almost totally governed by PSCs. The fiscal and non-fiscal terms of Indonesia's PSCs are mostly in line with international practice. However, there are still many existing contracts which do not have provisions for gas discoveries and therefore no predictable basis for forecasting the value to the producers of possible gas discoveries for domestic markets.

- *Underdeveloped Transmission and Distribution Infrastructure.* The country's transmission and distribution infrastructure is underdeveloped and constrains the development and expanded utilization of this economically and environmentally attractive fuel. Progress toward a competitive gas market, as envisaged by the new Oil and Gas Law, requires further development of gas transmission and distribution systems.

1.2.The broad objectives of the Government of Indonesia (GOI)'s policy to reform the energy sector are (a) efficiency and reliability, (b) transparency and competition, (c) minimization of the use of public funds, and (d) environmental soundness. GOI's strategy with respect to the above gas sector issues includes:

- *Phasing Out of the Subsidies and Rationalization of Energy Prices*. The prices of petroleum products in Indonesia are heavily subsidized. Prior to the recent increase in oil prices, the GOI has implemented phased increases in fuel prices that led to a reduction in fuel subsidies and more rational energy product prices. Following a Presidential Decree in December 2002, the subsidies for all products—with the exception of kerosene—were to be fully eliminated by the end of 2004 but the recent unprecedented surge in oil prices has again widened the gap between domestic prices and current international prices, and increased the amount of fuel subsidies. Substitution of domestic gas for imported fuels will be more beneficial to the economy in case of persistent high oil prices. The new Government is fully committed to addressing the oil product subsidy and gas pricing issues and to developing and implementing a rational gas pricing policy. Full removal of fuel subsidies will require more time than earlier planned.

- *Establishment of an Appropriate Legislative and Regulatory Framework*. Many of the sectoral issues have stemmed from the previous inadequate legislative framework governing the energy sector. In November 2001, the government enacted a new Oil and Gas Law, providing Indonesia with its first modern legal framework to fundamentally reform the oil and gas sector, through (a) the gradual development of a competitive market; (b) the establishment of an implementing body for upstream activities and an independent regulatory agency for downstream activities; and (c) the unbundling of the traditionally vertically integrated oil and gas businesses. The enactment of the implementing rules and regulations on October 18, 2004 will likely speed up the opening of the oil and gas sectors to competition and further private investments.

- *Restructuring of the Gas Sector*. PGN has already unbundled its key transmission activities from its distribution operation. It has brought several strategic partners into its gas transmission business through a subsidiary, and it listed, in December 2003, about 39 percent of its shares in the Jakarta and Surabaya stock exchange markets. Further restructuring of PGN to allow greater private sector participation in its operation and preparation for future sales of its shares and assets is under way.
- *Production-Sharing Contracts.* The gas-related issue of the PSCs for the new contracts will be resolved since the provisions of the new law and regulations provide for a competitive environment under which all producers will have direct access to consumers. The absence of a provision for gas discovery in the existing contracts will be resolved gradually, on a case-by-case basis.

2. Objectives

2.1. The most recent full Country Assistance Strategy (CAS), approved by the Board on October 29, 2003 (Report No. 27108-IND), focuses on assistance to Indonesia to overcome the low rate of investment and to improve the weak public service, two major impediments to reducing poverty. The objectives of the proposed project are fully consistent with, and give substantial support to, two of the five areas identified as essential to raise investment and improve (energy) services: fostering a competitive private sector and expanding Indonesia's infrastructure.

2.2. The development and implementation of a rational gas pricing policy will improve the efficiency of gas utilization, increase transparency, and create a more attractive environment for private sector participation, and thereby increase investment in the supply and utilization of natural gas. The restructuring of PGN is essential to ease entry into the growing gas market and to increase private investment in the gas sector. It will align PGN's corporate structure with the new law and recent regulations, and prepare it to operate in a competitive environment.

2.3. The physical expansion of the gas infrastructure under the proposed project will have a significant impact on alleviating infrastructure bottlenecks in Indonesia and improving quality of gas service in West Java. The project supports the reinforcement of PGN's distribution system to increase potential supply to about 550 mmcfd, more than three times PGN's gas sales in the region.

3. Rationale for Bank Involvement

3.1. Successful outcomes will significantly be enhanced by the Bank's assistance in addressing the critical issues facing the sector. Bank support during the preparation of the project helped in developing a sound legal and regulatory framework. During project implementation, it will continue the ongoing policy dialogue and cooperation with GOI and PGN on deepening the reform of the energy sector and implementing of the Oil and Gas Law. It will ensure adequate implementation of the recommendations of the Analytical and Advisory Activity (AAA) and Technical Assistance (TA) activities jointly carried out to date. The project will focus mainly on (a) designing and implementing an effective gas pricing policy and, (b) further restructuring of PGN to bring its corporate structure in line with the directions of the new Oil and Gas Law. Appropriate policies in gas pricing and the restructuring of PGN must be addressed "to improve the climate for high quality investments" to develop gas use in the domestic market. The Bank's involvement would also assure that these two issues are addressed in a timely manner to meet the market needs according to international best practice and the government reform objectives. This would pave the way to and attract private sector financing to meet the sector's investment needs.

3.2. The development of a comprehensive gas pricing framework in relation with the cost of production, transmission and distribution of gas will improve the transparency over payment, and revenues generated by the development of natural gas from the field to final users and allow the government and the regulator to make informed decisions in setting prices taking into account efficiency and equity

3.3. The GOI has secured US$485 million from the Japan Bank for International Cooperation (JBIC) for Sumatra-West Java Transmission Project (linked to the proposed project), as well as US$500 million from private investors and Pertamina for further field development. However, the Government and JBIC agree that additional investment alone is not enough to develop the domestic gas market and that Bank's strong global knowledge and experience would be instrumental in addressing long term policy issues to ensure the sustainability of the domestic gas market. It was agreed that the JBIC would rely on the Bank to address gas pricing issues to support its project.

4. Description

4.1. The project comprises two components:

(a) **Distribution Infrastructure Expansion:** This component to be implemented by PGN includes (i) construction of class 300 steel pipelines of 4 to 16 inch diameter with a cumulative length of about 235 km along with control valves and corrosion control facilities; (ii) construction of class 150 steel pipelines of 4 to 16 inches in diameter with a cumulative length of about 71 km, along with control valves and corrosion control facilities; (iii) installation of five off-take and two pressure regulation stations; (iv) installation of about 210 customer metering and regulating stations; (v) installation of a Supervisory Control and Data Acquisition (SCADA) system; and (vi) provision of radio and telecommunications equipment, information technology (IT) support, and emergency response equipment. The total cost of this component is US$120.7 million (including contingencies and value added tax (VAT), with IBRD financing of US$74.5 million, and

(b) **Capacity Building:** This component, to be implemented by PGN, involves assistance to PGN in upgrading its capabilities and systems in financial management, infrastructure planning, gas marketing, gas utilization, distribution system safety and integrity management, gas transmission and compression, and in upgrading the skills of its staff in these fields. The total cost of this component is US$6.2 million, with IBRD financing of US$5.5 million.

4.2. Three of the issues mentioned in A-1.1 will be addressed under the proposed project: (a) ***Pricing***. To help address the gas pricing issues, the Bank has provided funding to PGN under its power sector loan approved in June 2003 (Loan No. 4712-IND) to conduct a study to a develop gas pricing policy to: (i) establish sound pricing and regulatory principles compatible with the government's reform and macroeconomic objectives to increase the market orientation of the sector, foster competition where feasible and safeguard consumers from monopoly abuses; and (ii) consistent with the implementing rules and regulations, develop detailed transitional arrangements for a phased implementation of these principles. The consultants for the study have been selected and the study is expected to be completed by June 2005. The key findings of the study will be implemented under the proposed project, as part of the policy conditions discussed and agreed with the Government during negotiation;[1] (b) ***PGN restructuring***. PGN has taken several actions to initiate unbundling of its structure (consistent with the Bank's recommendation in previous operations and the new Oil and Gas Law), included strategic partners in its transmission operation, and offered equity shares to the public through initial public offering (IPO). The Bank, under its power sector loan approved in June 2003 (Loan No. 4712-IND), is providing assistance to PGN to study alternatives to further its restructuring and be prepared to operate in the future liberalized market envisioned by the new Oil and Gas Law. The consultants for the Restructuring Study have been selected, and the study is expected to be completed by June 2005. The key findings of the study will be used by PGN to prepare a pricing policy framework and gas transmission and distribution pricing principles and methodologies to be submitted to the government and the Regulator, as part of the policy conditions discussed and agreed with the Government during negotiations; (c) ***Infrastructure***. The proposed loan will finance the expansion of the gas distribution network. Although the amount of the loan is relatively small (US$80 million), the proposed project will have a significant impact in helping to alleviate gas infrastructure bottlenecks in Indonesia. The Bank's involvement in the project leveraged over US$1.0 billion of investment. This investment will expand substantially the gas infrastructure for development, transmission and distribution of natural gas, with potential supply of up to 550 mmcfd, or three times of current gas sales of PGN in the project region.

5. Financing

Source:	($m.)
BORROWER	48
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	80

[1] The implementation of rationalized pricing policy for most part falls under the purview of the newly-established regulatory body. There will continue to be extensive consultations between PGN and the regulatory body regarding the implementation of such pricing policy. As part the Pricing Study, the consultants will provide PGN with international experience on price setting, open access and other mechanisms to increase the market orientation of the sector. These will be shared and discussed with the regulatory body and would lead to informed decisions during the implementation of the agreed pricing policy.

Total	128

6. Implementation

6.1. PGN will be responsible for the implementation of both components of the project. It has established a Project implementation unit (PIU) with overall responsibility for managing coordinating all aspects of the project. The PIU will be supported by PGN's central departments.

6.2. Funds for this project will be borrowed by the Government and on-lent to PGN. The terms and conditions for this on-lending will be agreed with the Bank at the time of negotiations, and will be in the currency of the loan, in line with current government policy. A Subsidiary Loan Agreement is expected to be finalized between the GOI and PGN for this purpose, as a condition for loan effectiveness.

6.3. Financial management, disbursement and procurement arrangements have been discussed and agreed with PGN, to ensure transparency in the use of funds and clear fiduciary responsibility.

6.4. Furthermore, PGN has agreed to hire (a) a project management consultant to assist in the design and engineering, procurement, construction supervision, inspection of materials and works, and testing and commissioning, as well as overall project management related to the distribution component; and (b) a long-term technical advisor to assist in customer conversion and connection, system integrity management and technical skill development and enhancement.

7. Sustainability

7.1. PGN has taken several actions to ensure the sustainability of the project by contracting gas supplies from different sources, preparing a customers conversion and ramping up program, and committing to the implementation of gas sector reforms (including rationalization of gas pricing system) to ensure optimal use of resources and further opening of the gas market. Appropriate measures to mitigate the minor social and environmental impacts associated with the proposed and linked projects have been developed by PGN and agreed by the Bank. These will ensure the social and environmental sustainability of the project, the safety of the workers, PGN staff and the population during the construction period and the operation of the system.

8. Lessons Learned from Past Operations in the Country/Sector

The objectives of the Bank's previous gas distribution projects in Indonesia were to expand the physical network as well as to enhance the efficiency and the financial position of the implementing agency, PGN. While these objectives were successfully achieved, ex-post reviews of these projects stressed that gas pricing, and furthr restructuring of PGN should be addressed to accelerate the development of the domestic gas market. The current Project addresses these sectoral issues after the Government passed the Oil and Gas Law paving the way for further opening of the sector to new entrants and increasing its market orientation.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[X]
Pest Management (OP 4.09)	[ ]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[ ]	[X]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[X]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[ ]	[X]

10. List of Factual Technical Documents

Environment Impact Assessment Report (September 2004)
Project Implementation Plan
Gas Market Development in Banten and West Java

11. Contact point

Contact: Noureddine Berrah
Title: Lead Energy Specialist
Tel: (202) 473-1132
Fax: (202) 522-1648
Email: Nberrah@worldbank.org

12. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-5454
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

* *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas*