

The Proposed Nigerian National Gas Strategy

A Critique of the Options for Reform

NATURAL GAS STRATEGY- OVERVIEW

The State as

- RESOURCE OWNER
- TRANSMISSION OWNER
- COMMERCIAL OPERATOR
- REGULATOR
- INVESTOR AND
- POLICY MAKER

THE OBJECTIVES OF THE PROPOSED STRATEGY AND THE SCOPE FOR DEVELOPMENT

- Development of the downstream domestic gas sector
- Current utilisation= 1600 mscf/d
- Current reserves of gas available at 15c/75Mcf
- Level of investment required over 10 years:
 - \$14b on utilisation projects
 - \$785m on infrastructure

BARRIERS TO DEVELOPMENT

- **FINANCING:** FGN and private sector
- **PRICING REGIME:** lack of an objective price-setting mechanism
- **FISCAL ARRANGEMENTS-**need to access wider pool of investors
- **INSTITUTIONAL ARRANGEMENTS-**conflicts of interest
- **LEGAL AND REGULATORY FRAMEWORK**

OPTION 1

VERTICALLY INTEGRATED MONOPOLY

Key features;

NGC remains a vertically integrated utility with statutory responsibility for all downstream activities – transmission, distribution and retail supply

Concessionaires and any new transmission or distribution developer acts as agents to NGC through BOT and other contractual arrangements

OPTION 1 (continued)

- Advantages
- Strong co-coordinating role with full responsibility for the entire downstream gas sector is created, with a minimum structural change from existing arrangements
- Separation of upstream and downstream activities of NNPC

OPTION 1 (continued)

Wholesale prices remain set by government (or a regulator), with NGC as a single buyer

New legislation to define the role of NGC as a commercially driven entity, clarify title, taxation, create a regulator and define its role

Partial or complete privatization of the integrated company.

OPTION 1 (continued)

■ Disadvantages

- ◆ It creates less room for private investor participation
- ◆ Failure of NGC to implement reforms will be blamed on Govt.
- ◆ Expansion of the sector will be hampered due largely to government poor funding

OPTION 1 (continued)

- ◆ Low competition and application of discretionary pricing, rather than economically driven prices

OPTION 2

MULTIPLE DISTRIBUTORS

- Producers and distribution companies can negotiate directly
- NGTC retains monopoly of transmission.
- In each distribution zone, monopoly will continue.
- A Regulator is required to administer Third Party Access.

OPTION 2 (continued)

- NGC relinquishes ownership of responsibility for distribution to private sector parties but remains in the transportation.
- NGC single buyer could be privatized.
- Distributors given monopoly rights to construct low gas network and to supply connected customers in Local Distribution Zones.
- Distributors buy their total gas requirement from NGC at regulated price.
- Distribution companies' roles and responsibilities are defined in Regulations.

OPTION 2 (continued)

- Their activities and end user prices are controlled by means of distribution licenses overseen by the Regulator.
- A Network Code to define operational and technical arrangements on a distribution network for interfacing with the transmission network and for connecting customers.

OPTION 2 (continued)

■ Advantages

- ◆ Increase in gas utilization through increased private sector participation.
- ◆ Formalization of the current defacto arrangement for gas distribution.

OPTION 2 (continued)

■ Issues

- ◆ NGC under a privatized structure to supply power sector and large consumers.
- ◆ Penalty for failure by any LDZ to comply with the conditions under his license
- ◆ Distributors in the LDZ to have monopoly rights to construct a low pressure network to supply their customers within the zones.

OPTION 2 (continued)

■ Issues

- ◆ Pricing: A control mechanism for the prices on the end users to ensure that the distribution companies did not abuse their monopoly by applying discriminatory prices.
- ◆ Pricing principles to be used by the Regulator in determining tariffs for distribution.
- ◆ Defines precisely geographical areas for the LDZs so that their geographical boundaries can be revised overtime as market conditions.

OPTION 2 (continued)

■ Issues

- ◆ Distributors activities to be controlled through a distribution license regime who will be the regulator to ensure that companies meet their statutory responsibilities.

OPTION 3

WHOLESALE COMPETITION

- **Financing:** Distribution companies can build and own distribution sections of the network. No BOT arrangement.
- **Pricing:** Producers to Distributors/NGTC is deregulated. Distributors/NGTC to end users is regulated.
- **Fiscal:** Separate regime for upstream and downstream.
- **Institutional:** The need for an independent party to regulate access, infrastructure expansion, new entrants and end user prices.

OPTION 3 (continued)

■ Advantages/Disadvantages

- ◆ Improvement on options 1 and 2 in terms of competition.
- ◆ Producers could form a cartel to sell at high price.
- ◆ Load balancing could be a problem.
- ◆ Political pressure could be exerted on NGTC to favour its customers.

OPTION 4

Multiple Transmission Owners

- Key Features
- NGC relinquishes monopoly control of transmission infrastructure, independent parties construct and own major transmission pipelines
- A Transmission System Operator is created to regulate access to pipelines
- System development is also centrally planned by TSO to avoid fragmented dev and ensure investment targeted at project most beneficial to the sector as a whole

OPTION 4 (continued)

- Revenue requirements of each asset owner would be determined by the regulator and cost recovered through a regulated transportation charging structure, administered by the TSO
- Advantages
 - Creates more opportunity for private sector investment
 - Creates more gas supply security to end consumers
 - Infrastructure development will be driven by the market

OPTION 4 (continued)

- Upstream and downstream gas prices will be market driven.
- The regulated third party access tariff to pipelines will eliminate discretionary pricing of service
- Disadvantages
- Risk of inefficient investment in infrastructure

OPTION 4 (continued)

- Requires robust regulatory institutional framework

OPTION 5

■ RETAIL COMPETITION

- ◆ KEY FEATURES
- ◆ Largest end users entitled to choose supplier
- ◆ All parties in supply chain must be licensed(separation of distribution and supply)

OPTION 5 (continued)

- ◆ Third party access to monopoly distribution systems required
- ◆ Regulated charging structure for using distributors systems
- ◆ Settlement systems required to :
 - ◆ Match customers with supplier
 - ◆ Identify from whom suppliers purchase wholesale gas
 - ◆ Ensure supply and demand match

OPTION 5 (continued)

- ◆ Supplier of last resort must be nominated for each gas delivery point – being an entity that will supply a customer in the event of a supplier becoming unable to operate.
- ◆ End user price controls eliminated for large users able to contract directly with producers.

OPTION 5 (continued)

- ◆ As the transmission system becomes more complex, a single body will be required to oversee the operation of the whole system - Transmission system operator (TSO)

OPTION 5 (continued)

Advantages	Disadvantages
Theoretically most efficient	Massive IT implications and costs to balance supply and demand
End users can choose from whom to purchase gas	
End users will choose to purchase gas supplies from the most competitive source due to access to information	Increased transaction costs entailed in obtaining information about competing supply offers

OPTION 5 (continued)

- Obviously, this option will only work if end user non-payment is no longer an issue & provided that no part of the market is shielded from paying cost reflective prices.

CONCLUSIONS

- OPTIONS ARE PROGRESSIVE AND CUMULATIVE AND SHOULD BE IMPLEMENTED IN TIMED PHASES.
- THE MORE REFORMS ADOPTED, THE MORE ATTRACTIVE THE GAS REGIME WILL BE TO PRIVATE INVESTORS BUT THREE AND FOUR ARE CRUCIAL TO STIMULATING INVESTOR INTEREST.
- FOR THE REFORMS TO WORK, LEGAL, PRICING AND FISCAL REFORMS ARE ESSENTIAL.

CONCLUSIONS (continued)

- THE ROLE OF REGULATOR SHOULD BE SEPARATED FROM THAT OF OWNER, RESOURCE OWNER, TRANSMISSION OWNER
- COMMERCIAL OPERATOR, INVESTOR .