



**FEDERAL MINISTRY OF ENERGY**

Office of the Honourable Minister of State for Energy (Gas)



**NIGERIAN NATIONAL PETROLEUM CORPORATION**  
(NNPC)

# The Nigerian Gas Master Plan Investors Road Show 2008



**Abuja** 15th May    **London** 19th May    **Singapore** 23rd May



# **The Nigerian Gas Master-Plan - Investor Road-show**

**By**

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**May 2008**

## OBJECTIVES OF THE ROADSHOW



- 1. Present an overview of Nigeria's huge gas potentials and opportunities to participate in this rapidly evolving gas sector**
- 2. Present an overview of the measures in place to guarantee / secure investments**
- 3. Provide a platform for investor networking and syndication**

# CONTENT

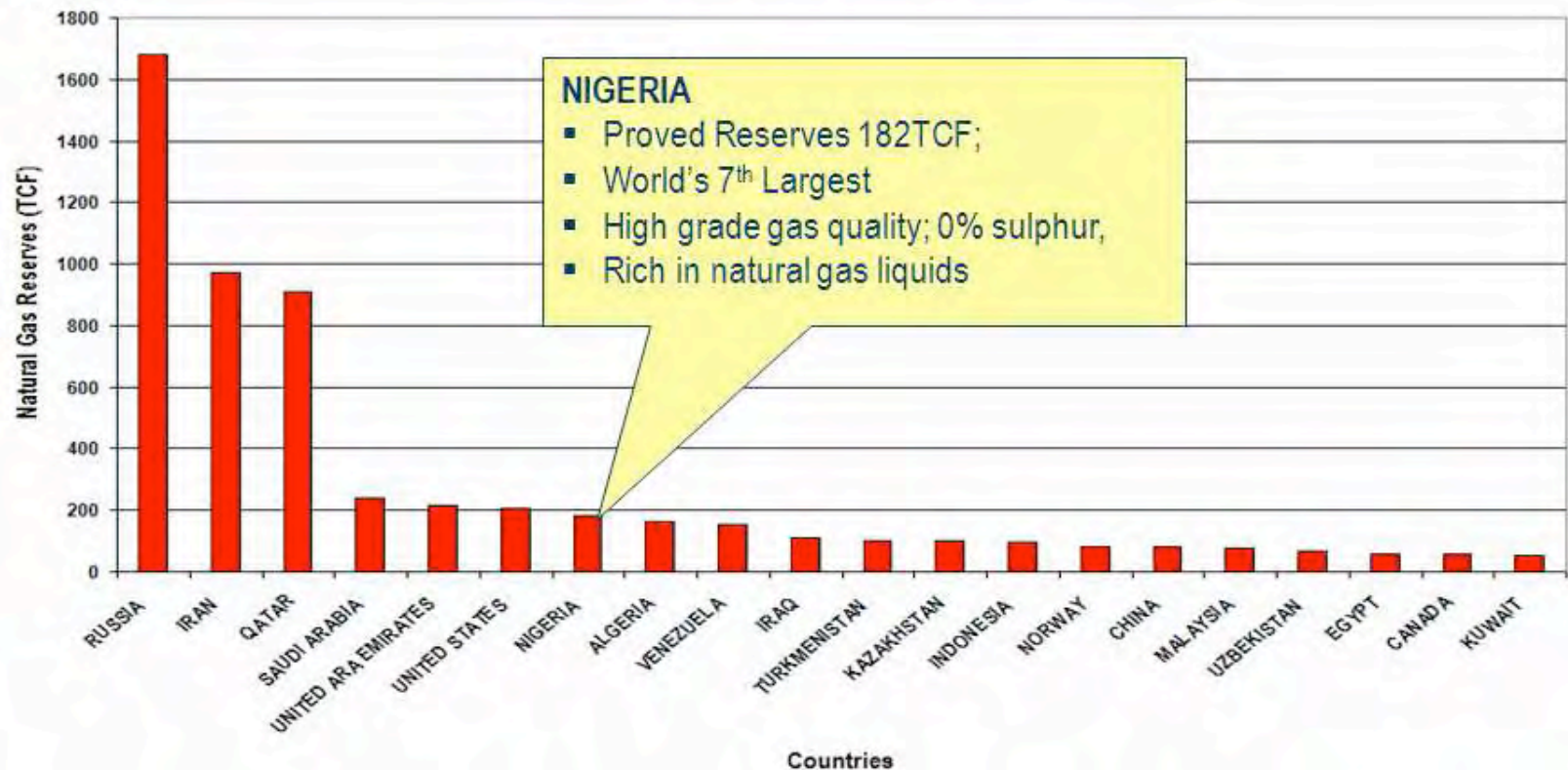


- **Overview of the Nigerian Gas Sector**
- **FGN Policy Aspiration for Gas**
- **Investment Opportunities**
- **Fiscal Terms**
- **Next Steps**

# GAS SECTOR POTENTIALS

## The Gas Resource Base

Top 20 Countries Natural Gas Reserves as of January 01, 2007



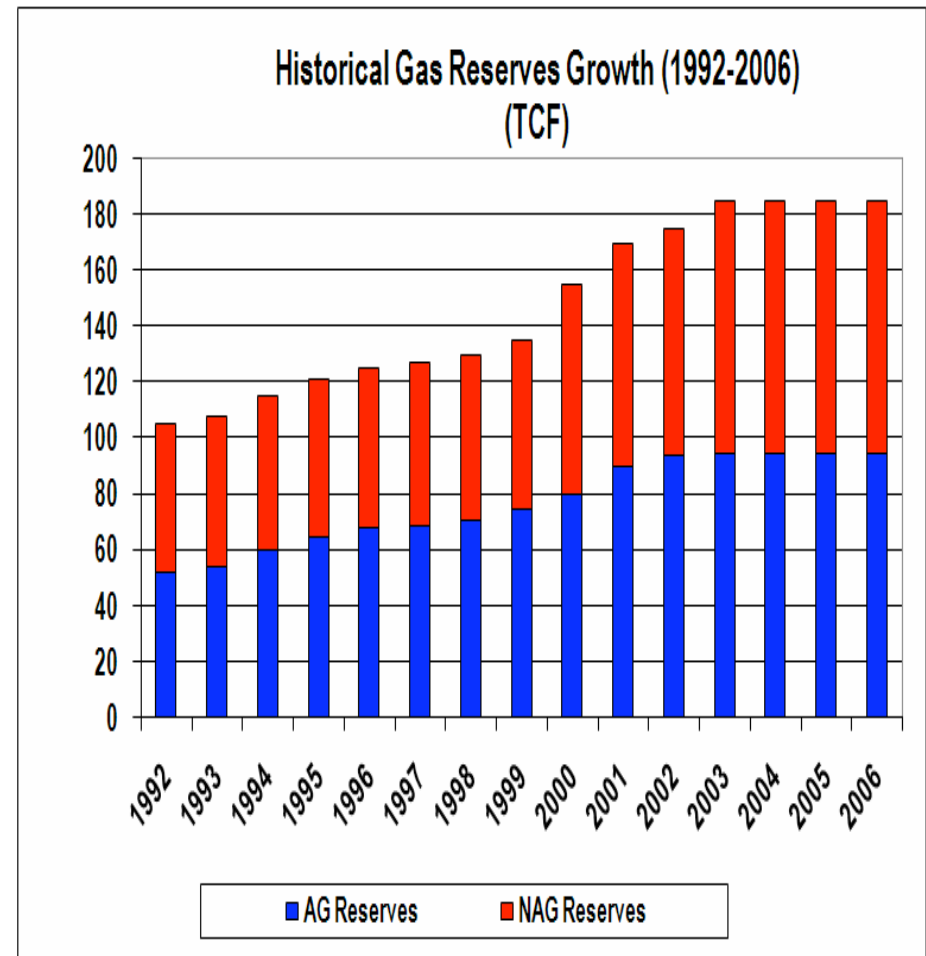
Source: Oil & Gas Journal, (December 18, 2006)

# GAS SECTOR POTENTIALS

## Historical Reserves Growth

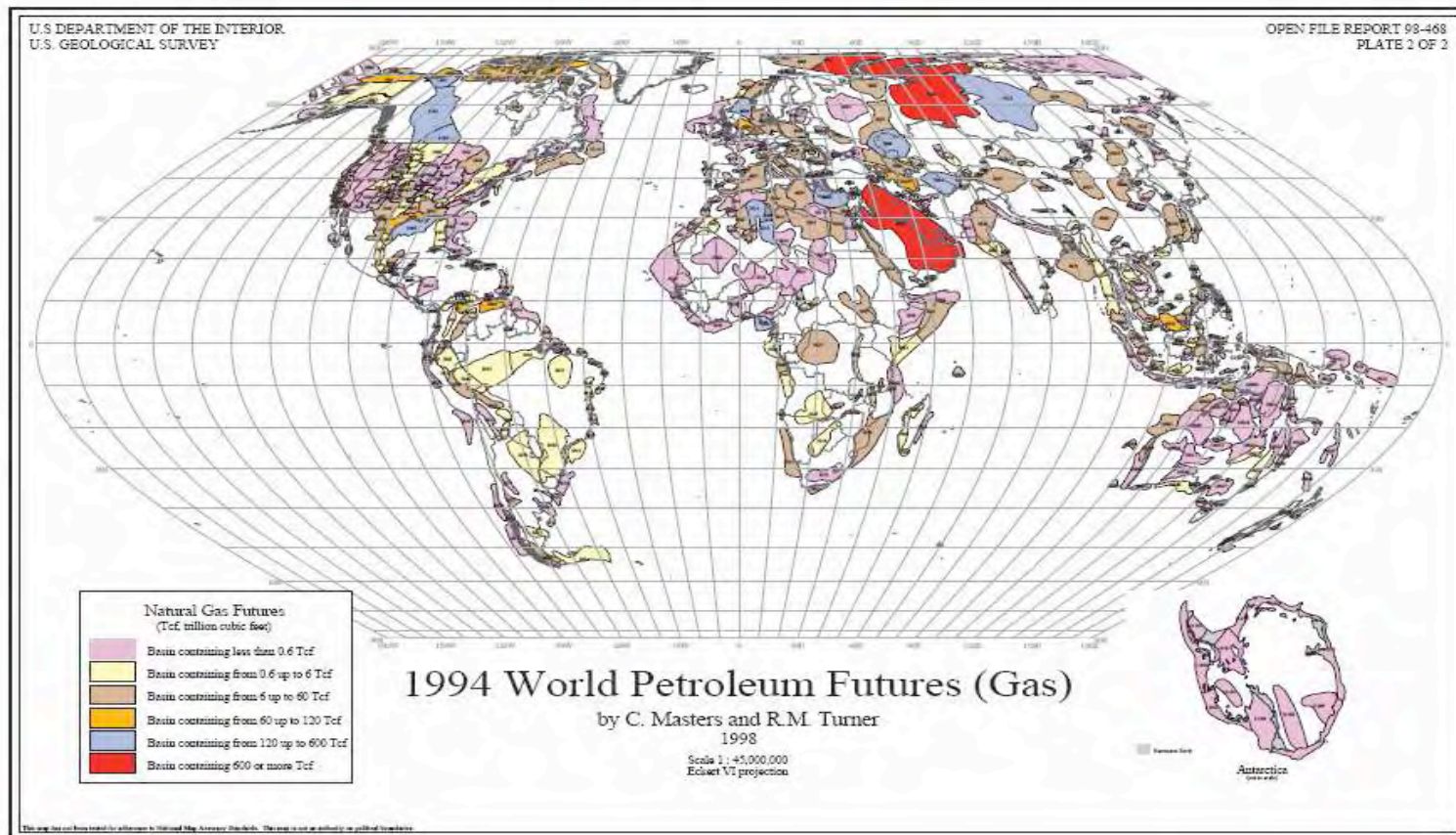


- **Steady growth in reserves**
- **Recent growth from deepwater basin**
  - Many basins remain untapped in Nigeria
- **No dedicated gas exploration**
  - All gas discoveries to date as a result of exploration for oil
  - Significant potential for reserves growth with focused gas exploration



# GAS SECTOR POTENTIALS

## Future Reserves Growth Potential



**Nigeria's reserves potential can grow to as high as 600TCF, making it the world's 4<sup>th</sup> largest after Qatar**

# GAS SECTOR POTENTIALS

## Robust Market Potential



### Nigeria's Evolving Market Position

#### Rapidly growing domestic market

- Many gas based industries relocating
  - Methanol, Urea and GTL plants
- Power sector reform
  - 2.5GW to over 15GW growth plan

#### Consolidating a regional position

- West African Gas pipeline project advancing for 200mmcf/d
  - Demand growth already evident
- Continued progress on the Trans-Saharan Gas Project

#### Rapidly growing LNG export position

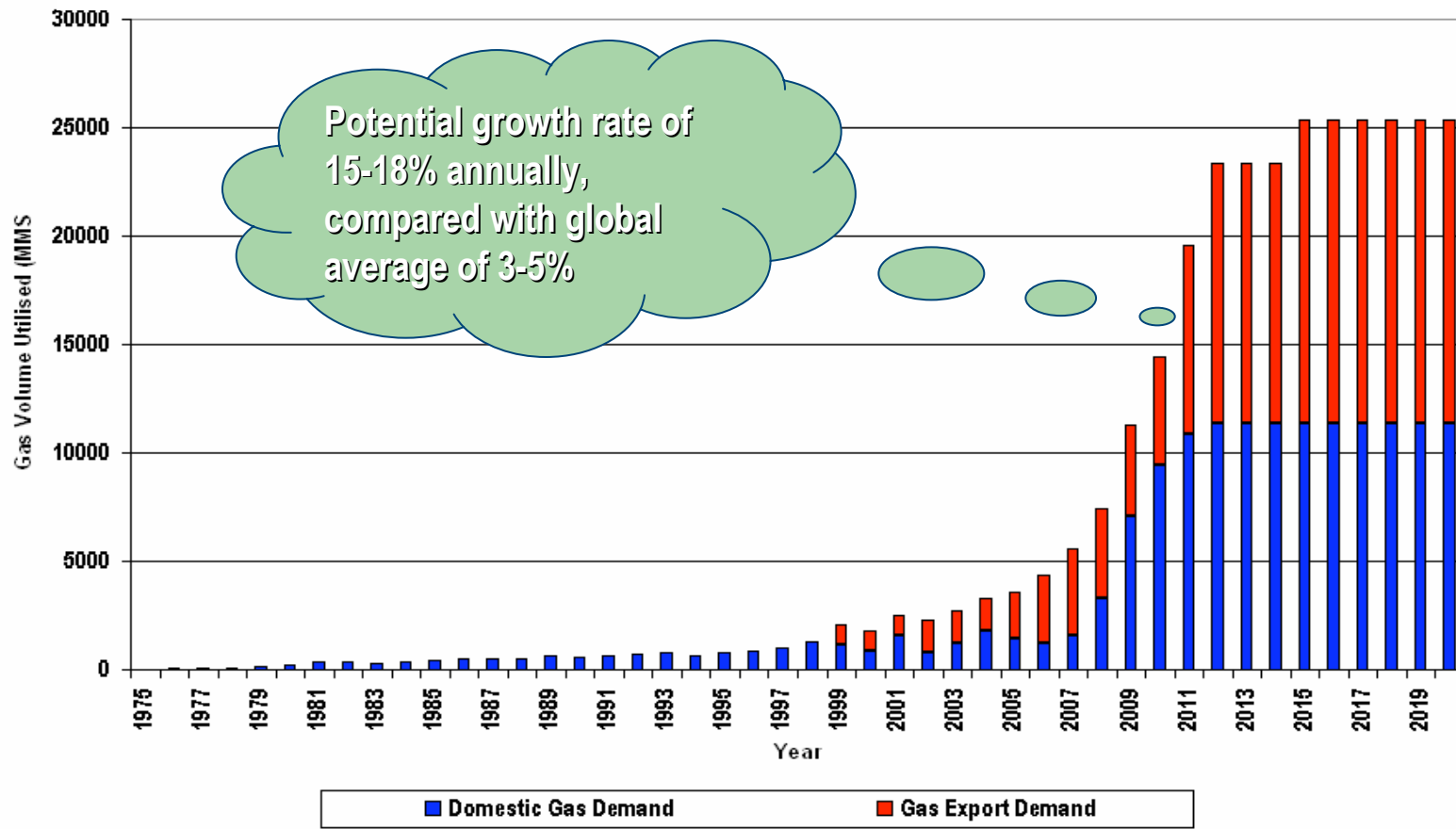
- NLNG T6 commissioned – capacity now 22MTPA
  - T7 planned
- Ok, Brass and other 3<sup>rd</sup> Party LNG plant under evaluation
- Nigeria now 2<sup>nd</sup> fastest growing LNG capacity after Qatar

# GAS SECTOR POTENTIALS

## Unprecedented Growth In Potential Demand

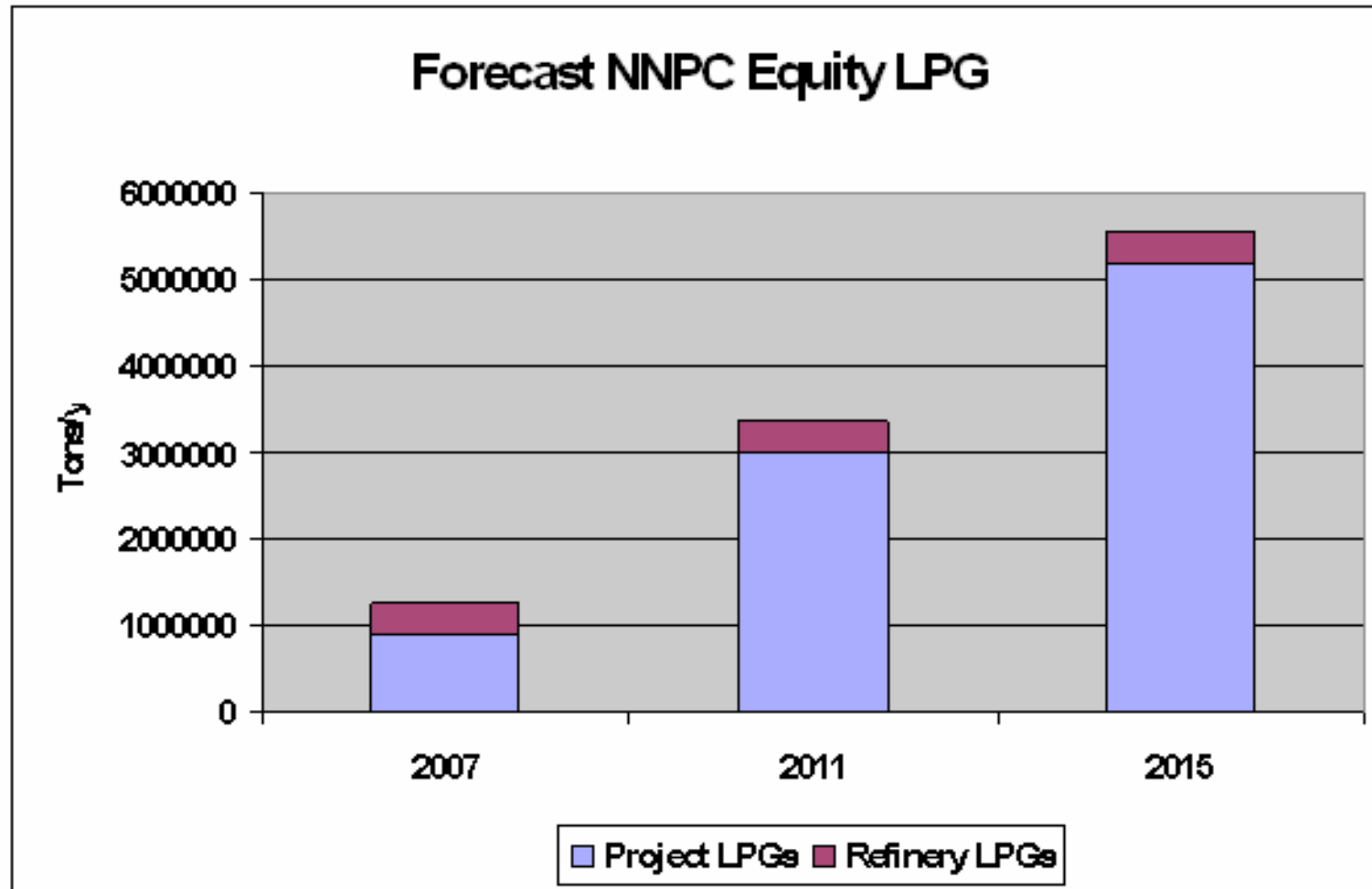


Nigeria's Historical Gas Utilization and Forecast Potential Demand



# GAS SECTOR POTENTIALS

## Forecast LPG Production



# CONTENT



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## FGN POLICY DIRECTION FOR GAS



- ❑ Fully exploit the potential in gas for accelerated economic development, in pursuit of the 10% GDP growth aspiration
  - ❑ Concurrent focus on a viable domestic, regional and other export markets
  
- ❑ Competitively position Nigerian gas in terms of cost competitiveness and scalability of capacity
  - ❑ *Integrated infrastructure strategy to support domestic , regional and export LNG markets*
  - ❑ *Attract new players into the Nigerian gas value chain*
  - ❑ *Ensure commerciality for all investments*

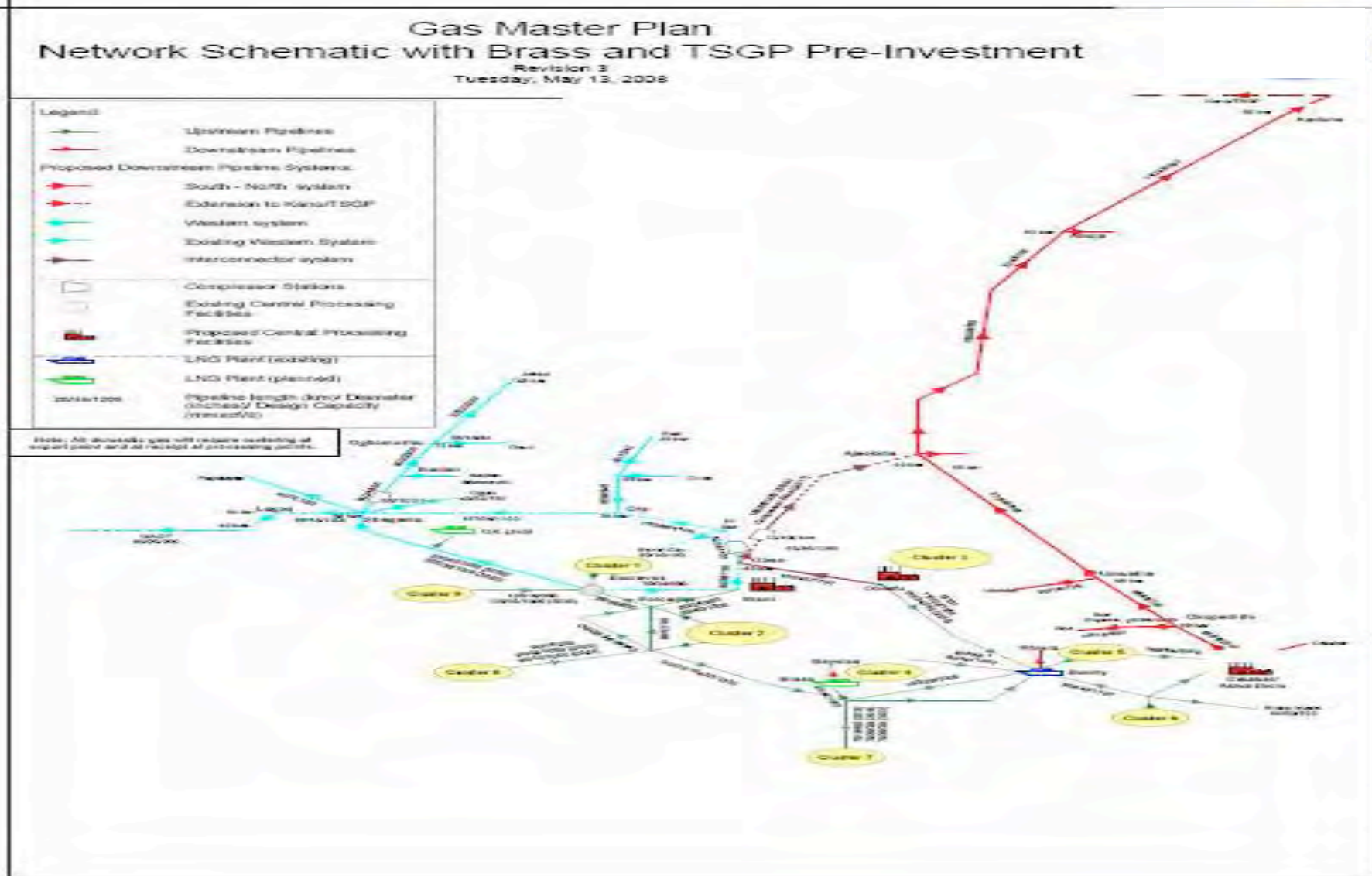
# FGN POLICY DIRECTION FOR GAS

## Repositioning For Viability – The Gas Master-plan





# THE GAS INFRASTRUCTURE BLUEPRINT



# CONTENT



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# THE GAS INFRASTRUCTURE BLUEPRINT

## 2 Key Investment Categories



- ❑ **3 central gas gathering and processing facilities CPFs**
  - ❑ **West Delta (Warri/Forcados Area)**
  - ❑ **Obiafu (North Port Harcourt)**
  - ❑ **Akwa-Ibom/Calabar Area**
  
- ❑ **3 gas pipeline transmission systems, including compressor stations**
  - ❑ **1200km South-North Line**
  - ❑ **700km Western system with 200km offshore extension**
  - ❑ **200Km Interconnector system**

# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Gathering and Processing Facilities



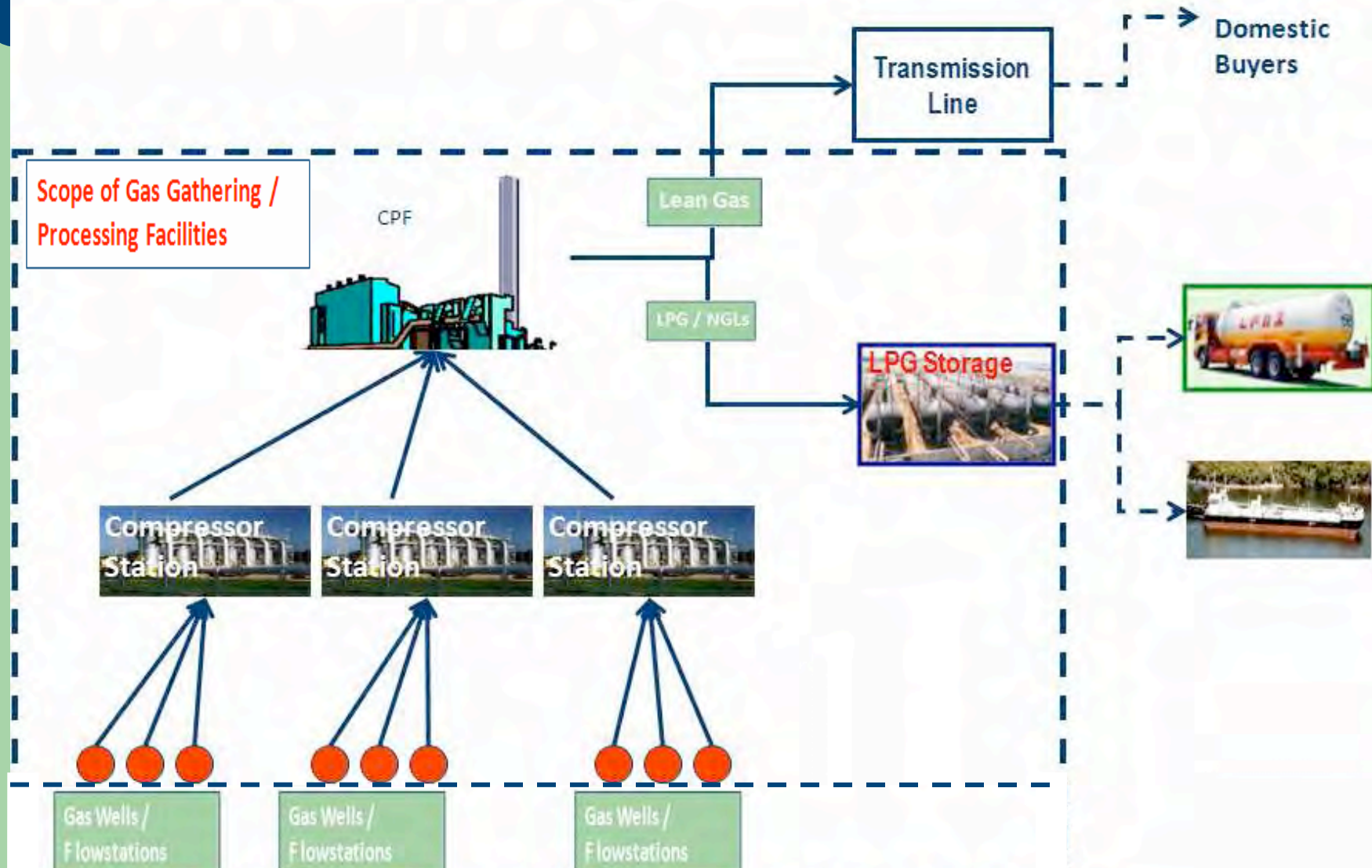
### Strategy

- ❑ These will be regional gas processing hubs
- ❑ Wet gas will be treated, LPG/NGLs extracted, lean gas exported into transmission system
- ❑ Plants owned and operated as tolling facilities for 3<sup>rd</sup> party gas
- ❑ Plant can also access and purchase 3<sup>rd</sup> party wet gas

### Scope of Investment

- ❑ Comprise gas gathering lines within designated franchise areas
- ❑ Network of compressor stations
- ❑ Gas treatment and LPG extraction facility
- ❑ LPG primary storage facilities

# SCOPE OF GAS GATHERING/PROCESSING FACILITIES INVESTMENT



# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Gathering and Processing Facilities



## Revenue Sources

### ❑ Gas Processing fees

- ❑ Determined by economics of project (basis for selecting final investor)
- ❑ Investment subject to rate of return regulation by the Gas Regulator
- ❑ Fees to be paid by gas producers (securitization of revenues through FGN and World Bank Guarantees, LCs for Private sector buyers)

### ❑ Incremental LPG sale

- ❑ Incremental LPG extraction beyond quality spec will be owned by CPF
- ❑ LPG can be sold into domestic and export markets

# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Gathering and Processing Facilities



## Revenue Sources

- ❑ **Sale of Acquired 3<sup>rd</sup> Party Gas**
  - ❑ **CPF through extended gathering system can access and purchase stranded gas**
    - ❑ **Target will be flared gas and or gas from marginal field operators i.e. CPF can act as a physical aggregator of gas within franchise area**
  - ❑ **CPF can utilize acquired gas for own export LNG plant or for other downstream domestic use**

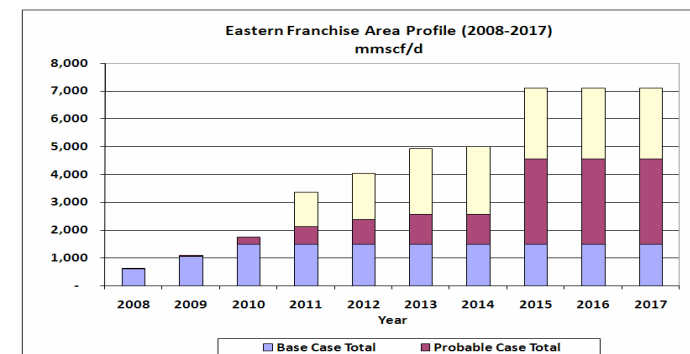
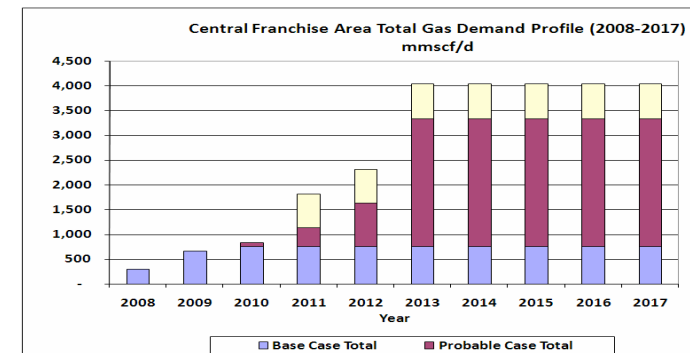
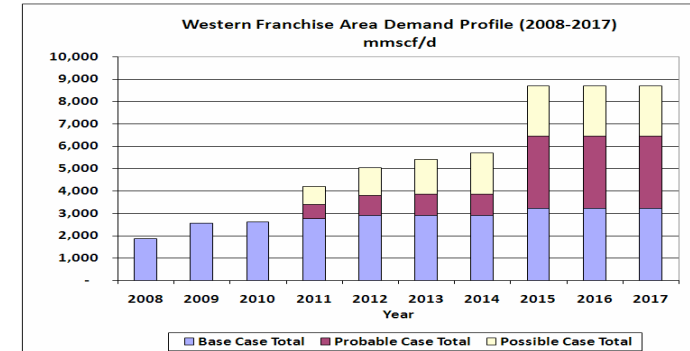
# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Gathering and Processing Facilities



### Capacity/CAPEX Phasing

- ❑ Forecast Gas Demand
  - ❑ Within each franchise area, a forecast gas demand has been compiled
  - ❑ Demand profile will form basis for capacity and CAPEX phasing
  - ❑ Capacity forecast by 2015
    - ❑ Western area range from 3-8bcf/d
    - ❑ Central Area range from 1-4bcf/d
    - ❑ South eastern area range 1-7bcf/d
  - ❑ Additional gas can be purchased on bilateral basis with the growing population of marginal fields etc



# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Gathering and Processing Facilities

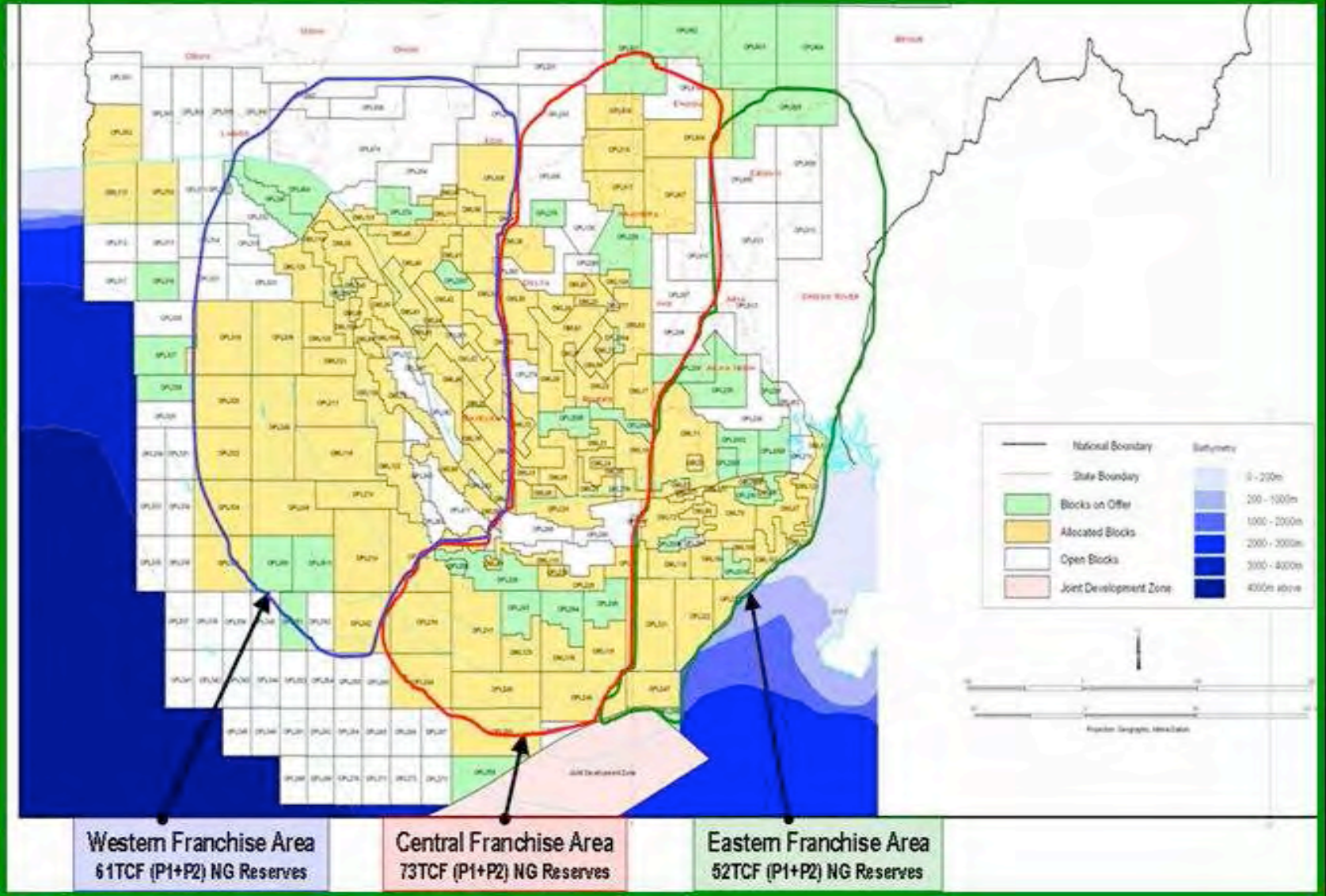


## Capacity/CAPEX Phasing

### ❑ Securing the Demand

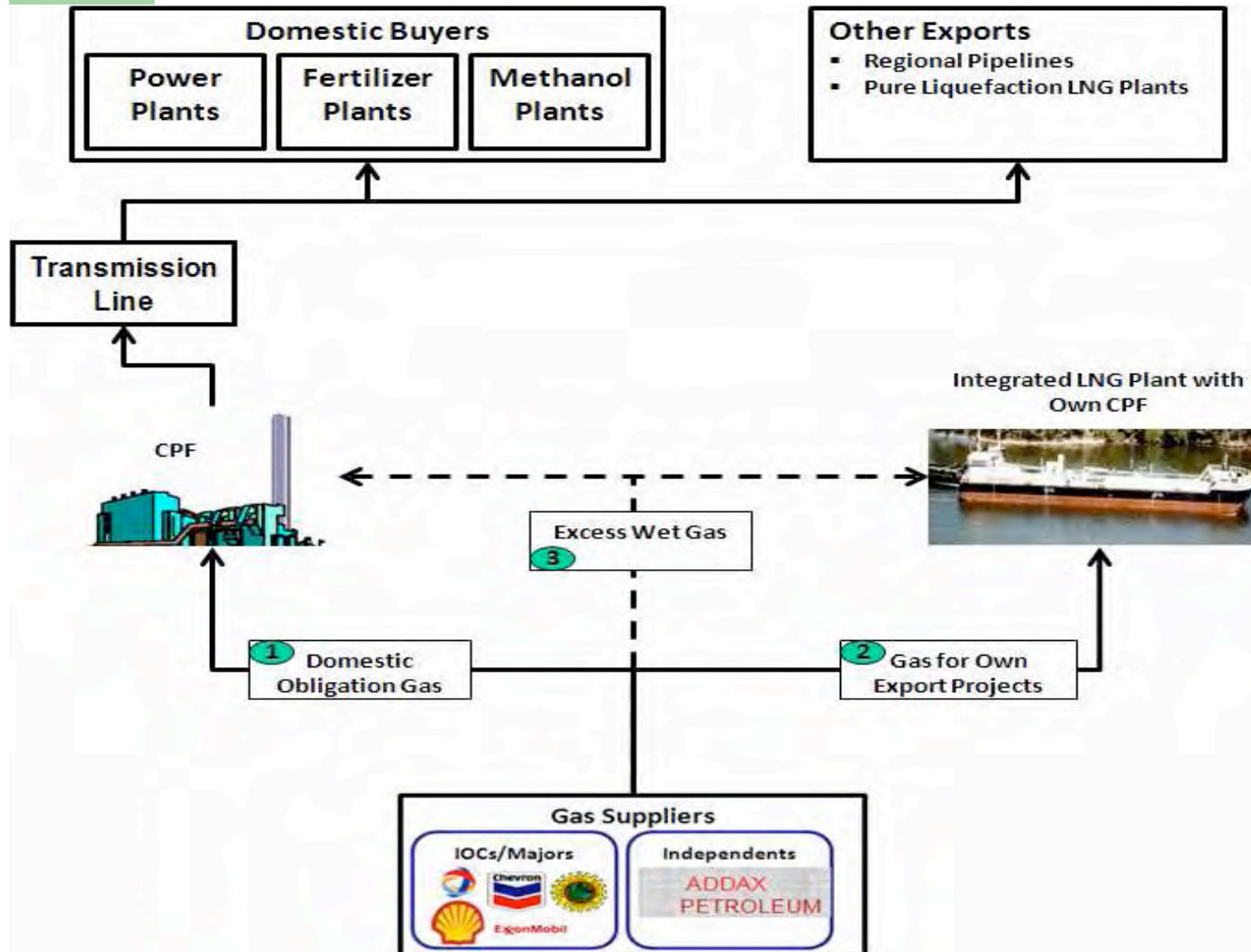
- ❑ Franchise areas delineated – CPF to have exclusive operational access within area going forward in addition to existing capacity
- ❑ GSPA's been signed for anchor customers within each franchise area
- ❑ Mandatory domestic obligations will underpin base throughput

# DELINEATION OF FRANCHISE AREAS



# GAS FLOW SCHEMATIC

## 3 FLOW CATEGORIES



- Gas from upstream suppliers have 3 possible flow paths

1. Meet domestic obligation
2. Meet own dedicated export project
3. Could be excess gas produced over and above domestic obligation

- Excess gas potentially could be

1. aggregated by and purchased by the CPF or
2. Bilaterally negotiated between supplier and end buyer and processed through CPF

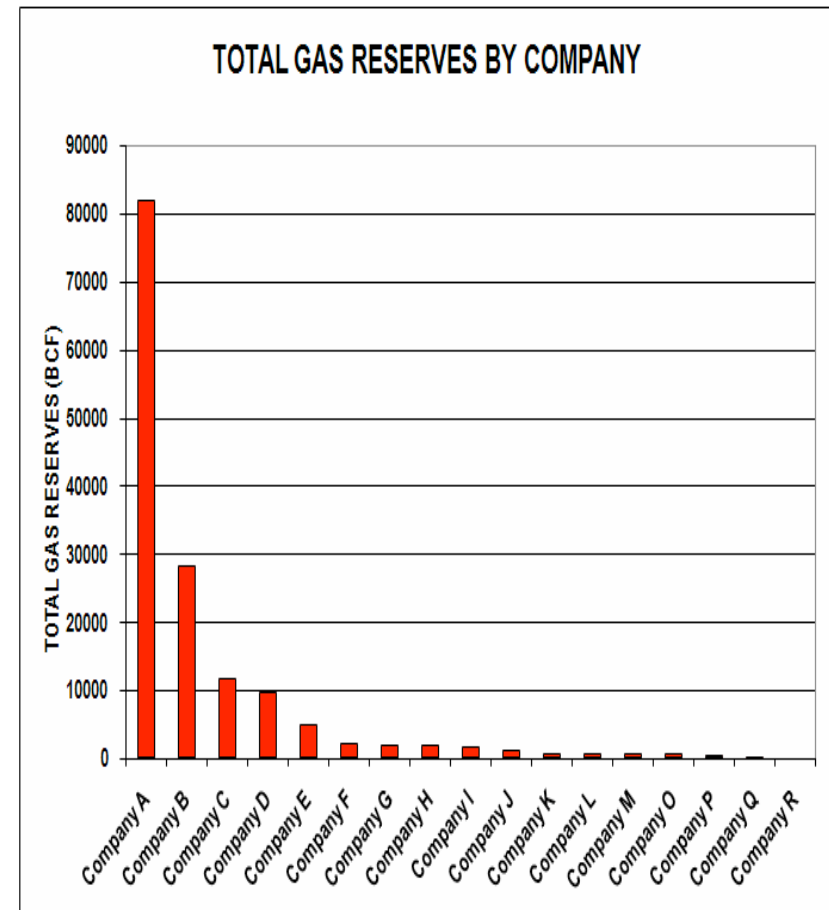
# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Gathering and Processing Facilities



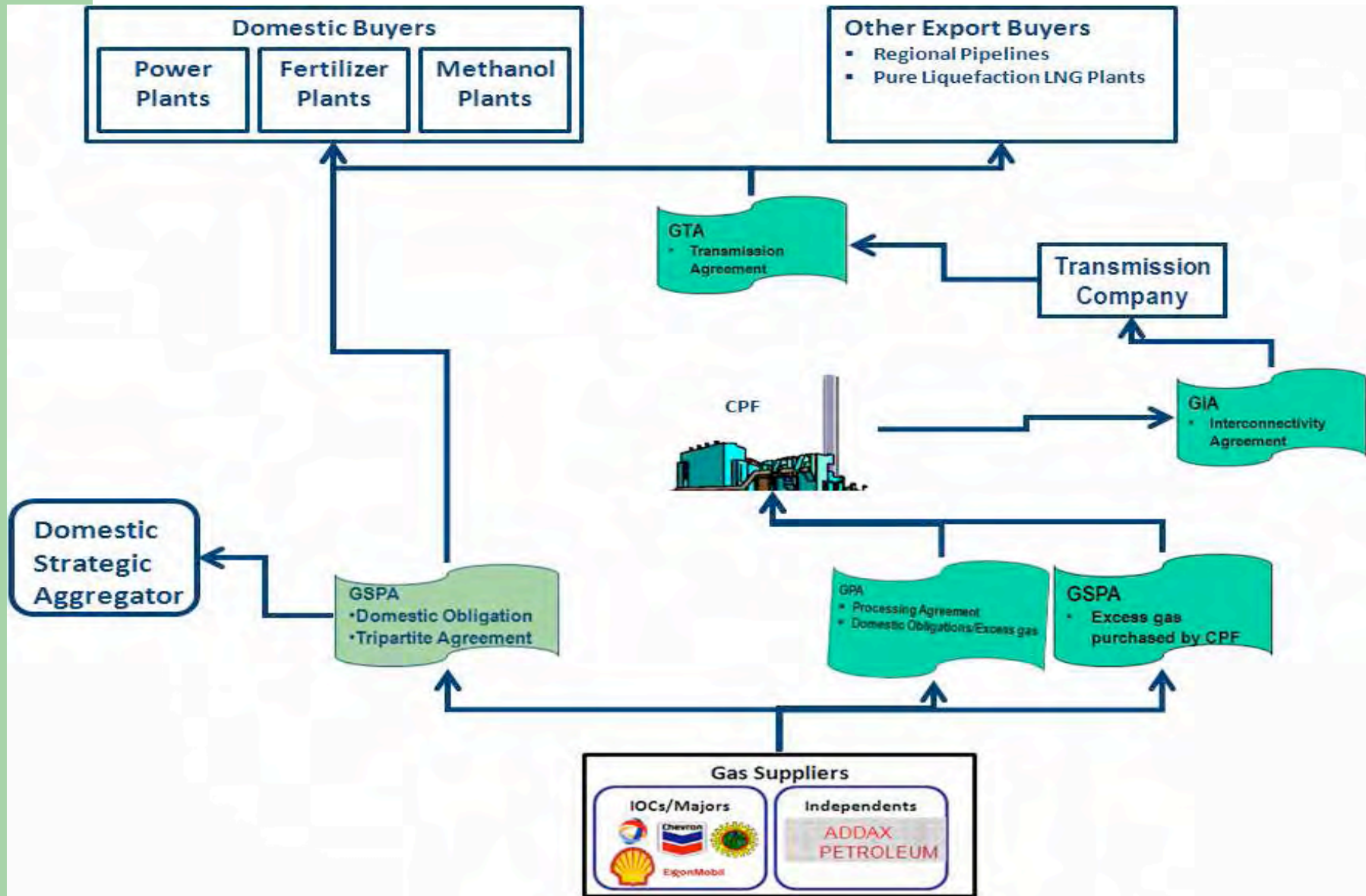
### Strategic Access to Gas Reserves by CPF

- Increasing number of 3<sup>rd</sup> tier oil and gas companies within Nigeria
  - Companies with less than 1TCF gas reserves
  - Scope to aggregate these gas (subject to bilateral arrangements)
  - CPF operator can utilize this gas for own export or domestic project



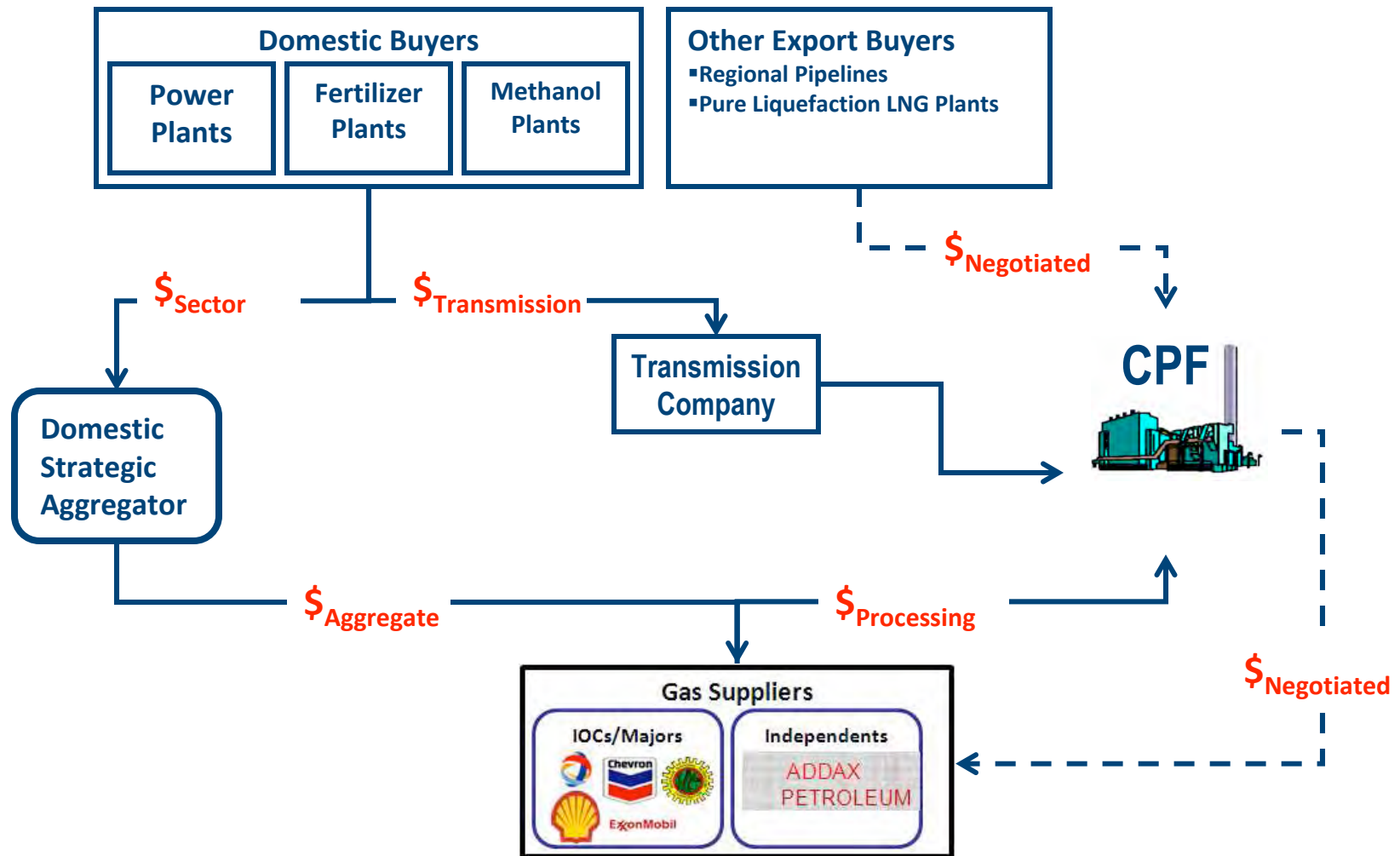
# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Contractual Framework



# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Composite Revenue Framework



# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Transmission Investment Opportunities



### 3 Gas Transmission Systems

#### South - North System

- 1,135KM Pipeline
  - 56" x 55KM
  - 48" x 1080KM
- Key Markets
  - Domestic
  - Trans Sahara
- Gas Throughput @ Peak
  - 3,800MMScfd

#### Western System

- 36" x 412km existing ELPS Pipeline,
- 42" x 200km offshore pipeline to Sagamu
- 24" x 265km Sagamu to Jebba
- Key Markets
  - Domestic
  - WAGP
- Gas Throughput
  - 3,250MMScfd

#### Interconnector System

- 306KM Pipeline
  - 36" x 196KM
  - 42" x 110KM

# INFRASTRUCTURE INVESTMENT OPPORTUNITY

## Gas Transmission Investment Opportunities



### Strategy

- ❑ 3 Transmission systems to be operated independently
- ❑ Systems will be interconnected

### Revenue Source

- ❑ Transmission tariff
  - ❑ Determined by economics of project (basis for selecting final investor)
  - ❑ Investment subject to rate of return regulation by the Gas Regulator
  - ❑ Tariff to be paid by gas buyers

### Contractual Arrangement

- ❑ Gas Transmission agreement between gas buyers and transmission company

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## APPLICABLE FISCAL TERMS

- ❑ **Applicable fiscal term is CITA**
  
- ❑ **CITA incentives (Decree 18, 1998):**
  - ❑ **Initial tax free period of 3 yrs, renewable for 2 more years (Decree 30, 1999).**
  - ❑ **Alternative to the initial tax free period (above), an additional ITA (investment tax allowance) of 35% which shall not reduce the value of the asset. Such company not entitled to the ITA of 15% in (b)(ii) below.**
  - ❑ **Accelerated capital allowance after the tax free period, as follows**
    - ❑ **An annual allowance of 90% with 10% retention for investment in plant and machinery (Decree 19, 1998)**
    - ❑ **An additional investment allowance of 15% which shall not reduce the value of the asset; (Decree 30 1999)**

## APPLICABLE FISCAL TERMS (Contd.)



- ❑ Tax free dividend during the tax free period where:
  - ❑ The investment for the business was in foreign currency, or
  - ❑ The introduction of imported plant and machinery during the period was not less than 30% of the equity share capital of the company.
  
- ❑ Interest payable on loan obtained with prior approval of the Minister for a gas project shall be deductible.
  
- ❑ The tax free period of a company shall start on the day the company commences production as certified by the Ministry of Petroleum resources.
  
- ❑ Gas utilization under CITA is defined as : *“the marketing and distribution of natural gas for commercial purpose and include power plant, liquefied natural gas, gas to liquid plant, fertilizer plant, gas transmission and distribution pipelines”*.

# **APPLICABLE FISCAL TERMS**

## **- Anticipated Legislative Additions**



- **No anticipated changes in CITA**
- **Downstream Gas Bill:**
  - **Regulatory framework for Downstream activities including open access principles.**
  - **Establishes the Gas Regulator**
  - **Regulator to determine reasonable return for common use facilities e.g. pipeline, CPF.**
- **Gas Fiscal Reform Bill**
  - **Removes Consolidation of Gas investment with Oil**
    - **Provides for a non discriminatory fiscal regime for all upstream Gas players**

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# INVESTOR TYPES



- ❑ **Open to all credible investors looking to have a foothold in the Nigerian Gas Sector through initial investment in a commercially viable gas infrastructure play**
  
- ❑ **2 Categories anticipated**
  1. **Pipeline Companies**
  2. **Gas Gathering and Processing Companies**
    - a) **Investors with broader LNG export aspirations**
    - b) **Investors with broader domestic industry (methanol, Petrochemical etc.) aspirations**
    - c) **Pure-play infrastructure Investors looking to build, own and operate gas facilities for commercial return**
    - d) **Private Equity Investors**

## INDICATIVE NEXT STEPS



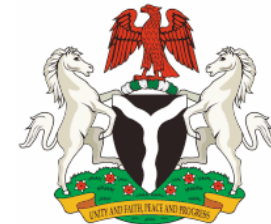
- **Clarification Period** **1<sup>st</sup> - 30<sup>th</sup> June**
  - Potential investors post questions for clarification on website
  - Questions answered and shared on website
  
- **'Invitation to bid'** **1<sup>st</sup> – 15<sup>th</sup> July**
  - Global advertisement (FT, Economist)
  
- **Investor Expression of Interest** **15<sup>th</sup> July – 15<sup>th</sup> August**
  
- **Investors Develops Bid Proposals** **15<sup>th</sup> August – 15<sup>th</sup> Dec.**
  
- **Proposal Evaluation and Selection** **Jan-Mar 2009**
  
- **Commencement of Investment** **April 2009**

## NEXT STEPS



[www.ngmproadshow.com](http://www.ngmproadshow.com)

**For further details from 1<sup>st</sup> June  
2008**



**Thank You!!!**