

UNLOCKING NEW FRONTIERS FOR GAS MARKET IN WEST AFRICA





PREAMBLE

- In today's world, natural gas is being described as the “new oil”. This is owing to its huge potential and benefit to the economy of nations and its ability to impact and transform society better than oil. West Africa is endowed with abundant gas resources far more than oil.
- According to the 68th Annual Edition of the BP Statistical Review of World Energy, 2019, natural gas consumption and production was up over 5% which is one of the strongest rates of growth for both demand and output for over 30 years. Global energy demand grew by 2.9% and carbon emissions grew by 2.0% in 2018, faster than any time since 2010 – 2011.
- Unlocking New Frontier for the Gas market in west Africa will require innovations and deployment of technologies in order to unlock significant new resources in processing and transportation. Gas market has been postulated to be ahead of other fossil fuel by 2030 because of its environmental benefits.
- Gas has the potential to catalyze industrial growth and development in addition to its role as a key revenue earner to government in West Africa State. However, despite having the highest gas reserves in Africa, only about 25 per cent of those reserves is produced or under-developed.



P R E S E N T A T I O N O U T L I N E

1. P R E A M B L E
2. U N L O C K I N G N E W F R O N T I E R
 - F O C U S A R E A S
 - D E V E L O P I N G N E W T E C H N O L O G I E S
3. N G E P
 - A U T O G A S D E V E L O P M E N T
 - G A S R E T I C U L A T I O N
 - G A S B A S E D I N D U S T R I E S
 - L P G P E N E T R A T I O N
 - G A S R E T I C U L A T I O N
4. P O T E N T I A L O F F L A R E D G A S
5. D O M E S T I C L P G C O N S U M P T I O N U P D A T E
6. J O B C R E A T I O N O U T L O O K



EXISTING ENERGY SOURCES

FIREWOOD

COAL/CHARCOAL

LIQUID FUEL

RENEWABLES



ASSOCIATED PROBLEMS

DEFORESTATION



ENVIRONMENTAL
HAZARD



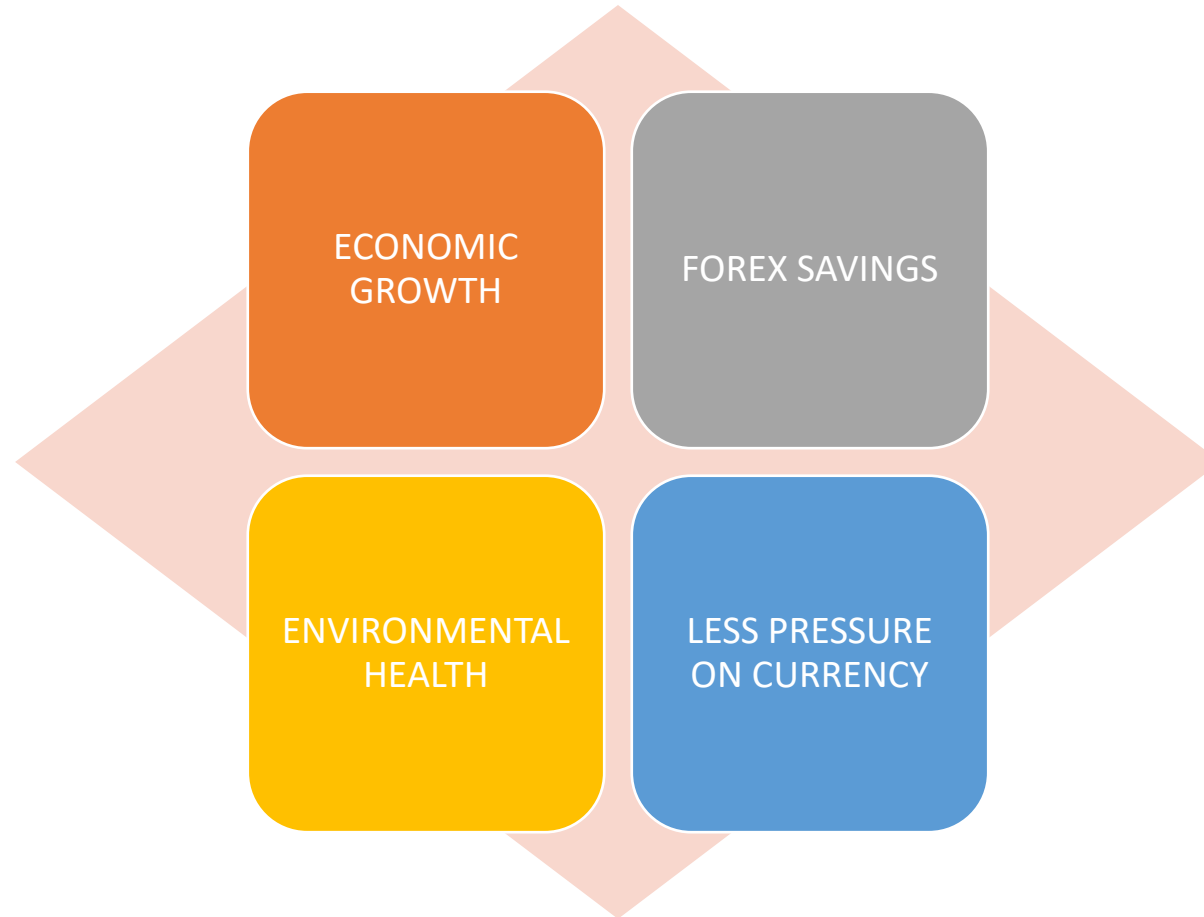
DEPLETING FUEL



STRANDING



GAS AS AN ALTERNATIVE



SOURCES OF GAS

- LOCAL PRODUCTION THROUGH DOMESTIC SUPPLY OBLIGATION
 - EXCESS IOC GAS
- UNUTILIZED GAS FLARES
 - IMPORT





LOW GAS CONSUMPTION IN WEST AFRICA

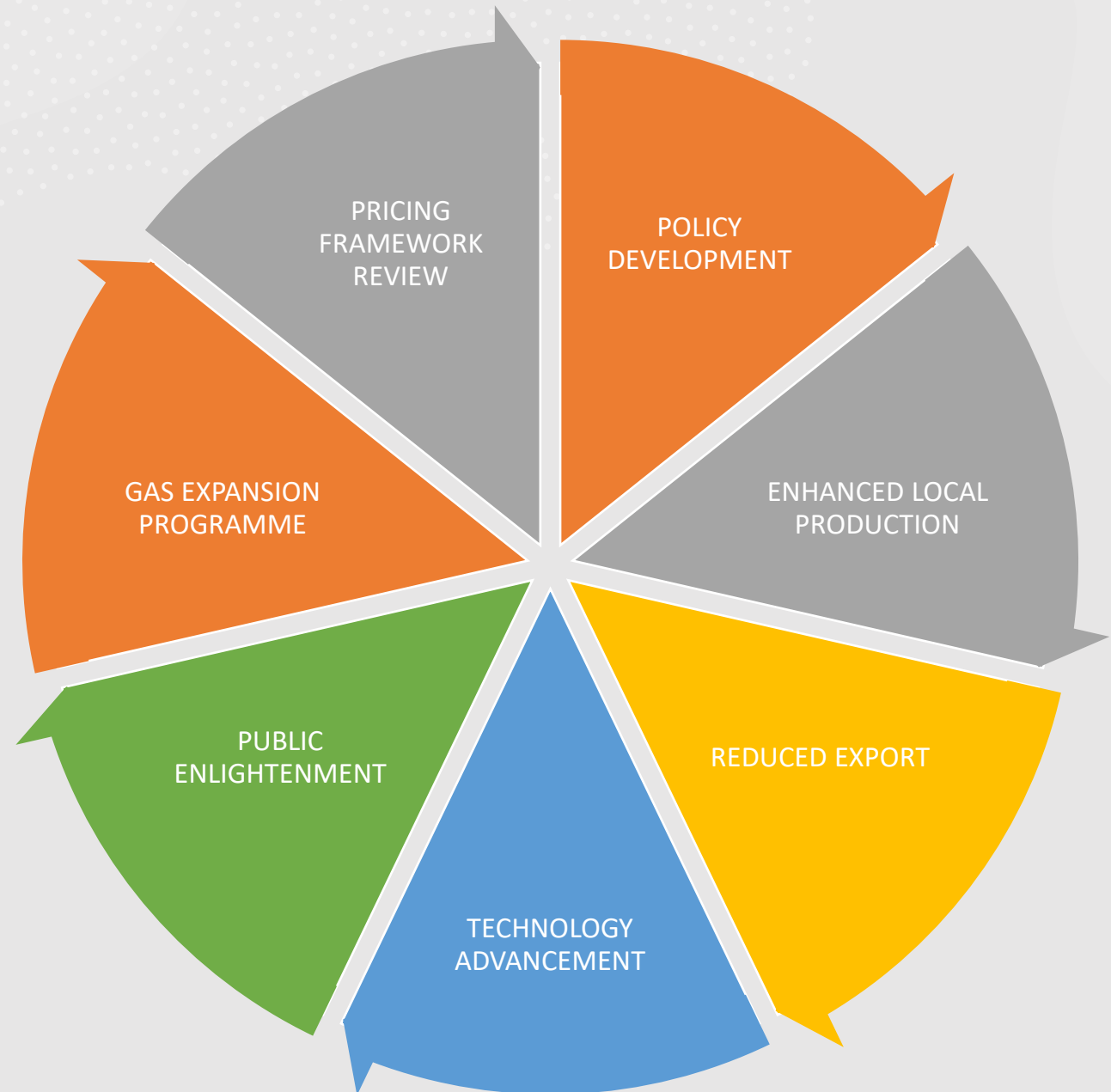
AS AT 2017, PER CAPITA GAS CONSUMPTION IN WEST AFRICAN COUNTRIES ARE AS FOLLOWS:

▪ NIGERIA	2.20KG
▪ TOGO	1.01KG
▪ COTE DE VOIR	7.23KG
▪ SENEGAL	9.39KG
▪ GHANA	11.60KG





UNLOCKING NEW FRONTIER S THROUGH POLICY INNOVATIO N & TECHNOLO GY



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KEY DRIVERS OF DOMESTIC GAS CONSUMPTION





STRATEGIES DEPLOYED

- POLICY DEVELOPMENT/REVIEW
- GAS NETWORK CODE
- NLNG TRAIN 7
- PRICING ADMINISTRATION
- NEW JETTIES AND DEPOTS
- EXPANDED PRODUCTION FACILITIES/CAPACITY
- VIRTUAL GAS TRANSPORTATION
- AUTO GAS DEVELOPMENT
- LPG PENETRATION
- SAFER GAS ACCESSORIES
- DOMESTIC SUPPLY OBLIGATION
- TECHNOLOGY INNOVATIONS
- NATIONAL GAS FLARE COMMERCIALIZATION PROGRAMME
- REGULATORY REVIEW
- AWARENESS CREATION
- HEALTH SAFETY AND ENVIRONMENT HSE



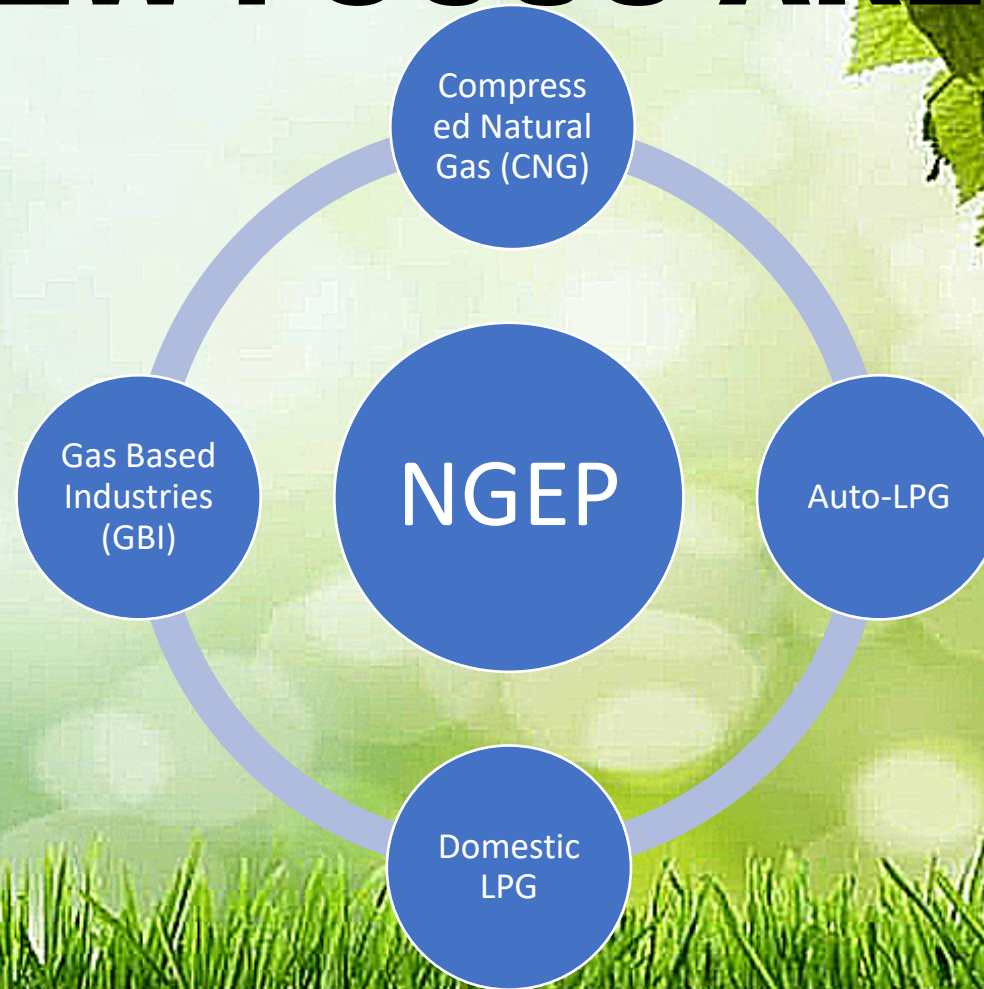
The NGEP offers a Unique
Opportunity
...unlocking all gas molecules as “a
favourable combination of
solution”



NGEP Objective: “To reinforce & expand gas supply as well as stimulate demand in the country through the effective & efficient mobilization and utilisation of all available assets, resources and infrastructure in the country.”.

- NGEP is conceived & designed to serve as a catalyst for adding value to the vast natural gas reserves Nigeria is endowed with.
- Identification of existing policy, legal and regulatory frameworks & commercial instruments that are hindering the development of the local gas sector.
- Reform & implement the promotion of a market structure in a manner that will ensure the utilization of gas infrastructure, assets and facilities on a common carrier and co-sharing basis.
- Formulate strategies that will promote cost effective distribution of the various gas streams by marine, rail and road for achieving a most affordable, available, acceptable and accessible gas to Nigerians.
- Engage all state and non-state actors in sensitization programmes on all aspects of safety in relation to gas utilization in the country.
- NGEP is to contribute towards the implementation of Mr. President’s June 12 promise to take 100 million Nigerians out of poverty within the current decade.
- NGEP has the capacity to reduce poverty by making locally available, produced, affordable and accessible fuel to mostly under-served communities in the country.
- Contribute to job creation and human capital development through new investments in the gas sub-sector.

NGEP STRUCTURE AND NEW FOCUS AREA



GAS BASED INDUSTRIES



POLYMER PRODUCTION



FERTILIZER



CONDENSATE



TEXTILES



UREA, AMONIA AND OTHER CHEMICALS



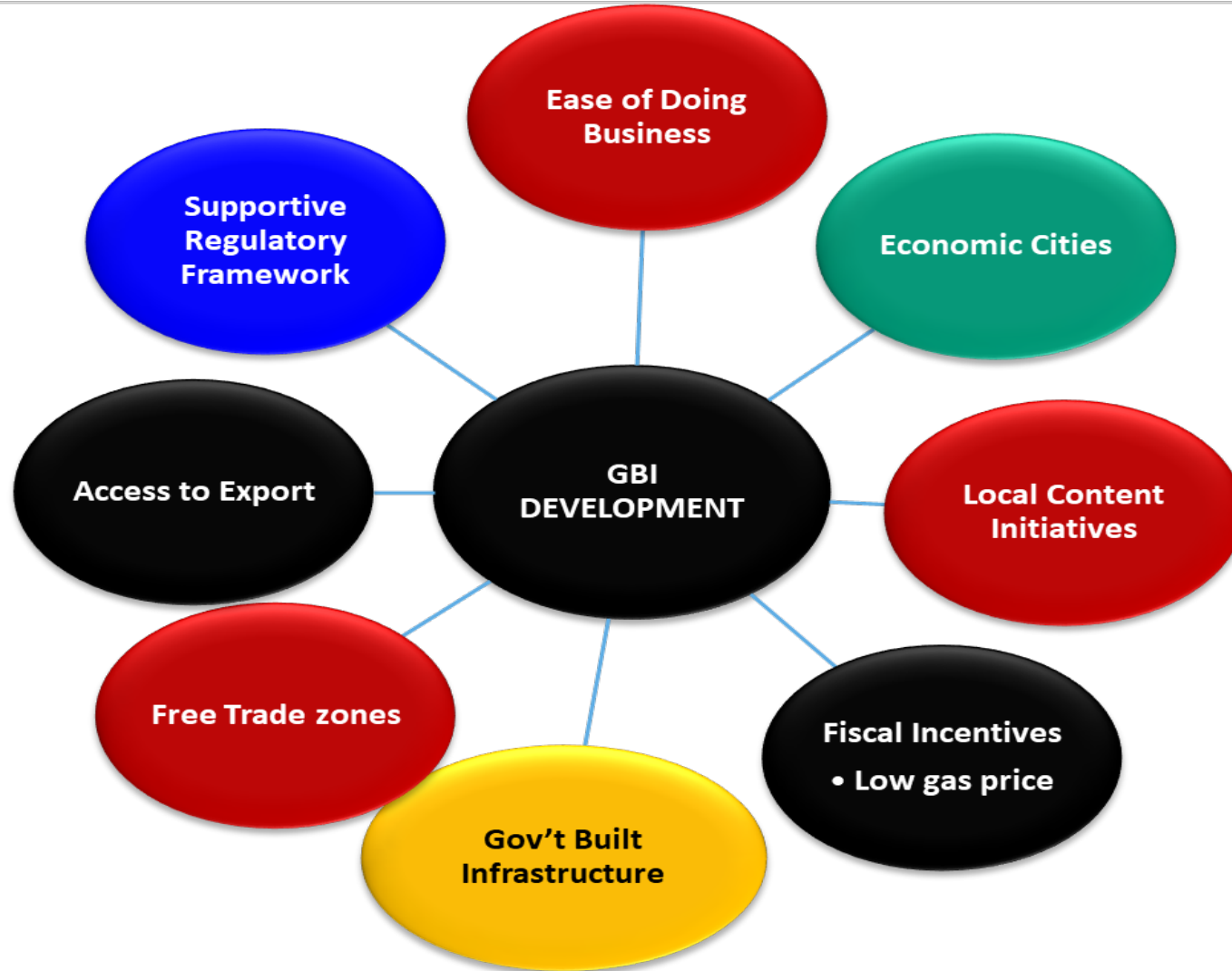
Importance of GBI to National Economic Development



- ❑ Economic Development through utilization of natural gas as feedstock for mega Industrial Projects.
- ❑ Diversification by reducing reliance on oil revenue.
- ❑ Providing high quality employment Opportunities
- ❑ Creating downstream added value (Building Blocks for industrialization)
- ❑ Increasing the GDP
- ❑ Generating and saving foreign Exchange.
- ❑ Reducing import dependency
- ❑ Attracting FDI
- ❑ Technology Transfer.
- ❑ Supporting wide range of agro-based activities



Critical Success factors for GBI development





CHALLENGES HINDERING GBI DEVELOPMENT

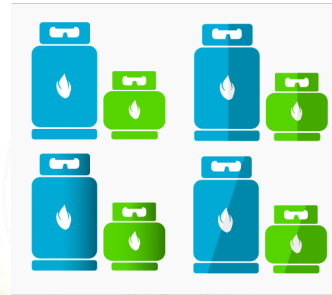
- **HIGH PRICE OF FEEDSTOCK**
- **GAS SUPPLY AVAILABILITY**
- **LACK OF INFRASTRUCTURE**
- **COMMUNAL AND ENVIRONMENTAL ISSUES**
- **GLOBAL MARKET COMPETITION**
- **LOGISTICS ISSUES**

DOMESTIC LPG PENETRATION

- MICRO DISTRIBUTION CENTRES MDC



- CYLINDER PENETRATION



- STARTER PACK DEPLOYMENT



- PUBLIC ENLIGHTENMENT ON SAFE USAGE



GAS RETICULATION

LNG, CNG, LPG

DEVELOPMENT
OF HOUSING
CODE

RETICULATION
OF ESTATES



AUTO GAS DEVELOPMENT

- AUTO CNG STATIONS
- AUTO LPG STATIONS
- VEHICLE CONVERSION
- GENERATORS
- CO-LOCATION AT GAS STATIONS
- DUAL FUEL VEHICLES





SOME NGEP KEY STRATEGIES

- CASCADING THE PROGRAMME TO THE STATES TO SEIZE THE INITIATIVE
- INVOLVEMENT OF GOVERNORS FORUM (NGF) AND ASSOCIATION OF LOCAL GOVERNMENT OF NIGERIA (ALGON)
- THE ANAMBRA-EKITI TRENDING
- PRIVATE SECTOR AS PARTNERS AND OWNERS OF THE INITIATIVES: GOVERNMENT AS ENABLERS AND PATHFINDERS
- KEY FOCUS ON TRAINING OF NIGERIANS AND CAPACITY BUILDING
- EXTENSIVE STAKEHOLDER ENGAGEMENT AND MOBILIZATION

NATIONAL GAS FLARE COMMERCIALIZATION PROGRAMME

- **6,00,00MT OF LPG UNLOCKED ANUALLY**
- **GENERATION OF 300,000 DIRECT AND INDIRECT EMPLOYMENT**
- **22 MILLION TONS OF CARBON-DIOXIDE EMISSIONS STOPPED**
- **SAVES OVER \$1BILLION ANUALLY**
- **EXPECTED \$3 BILLION FOREIGN DIRECT INVESTMENT**
- **2.5 GW ELECTRICITY GENERATION**
- **6 MILLION HOUSEHOLDS ACCESSIBLE TO CHEAP ENERGY**





GROWTH IN CONSUMPTION ON LEVEL IN NIGERIA

- 2015: 298,249 MT
- 2017: 420,267 MT
- 2020: 1,020,251 MT

JOB CREATION OUTLOOK

- MICRO LEVEL SALES: 573,126
- AUTO GAS CONVERSION: 374,600
- AUTO GAS SALES: 50,000
- AGRO PROCESSING: 13,932
- CYLINDER MANUFACTURING: 2,500
- FOUNDRY AND STOVE: 12,255
- TRUCKING: 17,029
- WORKS AND HOUSING: 232,200
- STORAGE DEPOTS: 3,800



CONCLUSION

- 5,000,000 MT ANNUAL CONSUMPTION FOR LPG BY 2022 IS NO LONGER A MIRAGE
- 40% SWITCH IN DOMESTIC UTILIZATION OF PMS, AGO, DPK TO GAS OVER THE NEXT 10YRS IS ACHIEVABLE.
- WITH THE RIGHT POLICIES, PRICING AND EFFECTIVE IMPLEMENTATION IN PLACE, DOMESTIC GAS VOLUME WHICH IS ON THE UPWARD TREND WILL CONTINUE TO NARROW THE GAP WITH EXPORT.
- WILLING SELLER MARKET IN NIGERIA WILL EVENTUALLY HERALD THE MUCH DESIRED INTERNATIONAL STATUS FOR NIGERIAS GAS SECTOR



Thank
you

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