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EN ROUTE TO SUSTAINABLE REGULATION UNDER NEW MARKET PARADIGMS

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Lessons from the Energy Crisis and Nigerian Energy Outlook

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Nigerian Electricity Supply Industry

- Grid capacity of 8GW
  - Daily average supply to end-use customers ~ 5GW
  - 80% from natural gas and 20% from hydro
  - Multiple players in gas supply, generation, wholesale/retail, and distribution
  - Single national grid interconnected with the West African Power Pool (WAPP)
  - Transactions are mainly through bilateral contracts on open access grid framework
- Off-grid supply ~24GW largely from diesel/petrol generators
- Urgent work being done to improve energy access.

Impact of the Energy Crisis

- Greater dependence on the grid
- Higher gas prices
- Reduced gas supply to the domestic market
- Renegotiation of contracts (gas and electricity)
- Higher end-user electricity tariffs
- Increased subsidy financing by the State
- Higher inflation driving further reviews to electricity tariffs

Lessons for Developing Competitive Markets

- Imperatives of having a contract-based market
- Susceptibility of best-endeavour contracts to exogenous shocks
- Need for a sustainable energy mix
- Providing appropriate incentives to support market reforms
    - Regulated or market-based gas prices
    - Standardised contracts
    - Predictable market conditions
    - Stable regulatory environment

Security of Supply

- Update integrated resource plan to safeguard against future shocks
- Improving engagement and investment in regional markets (WAPP)
- Explore hydro resources to improve the energy mix
- Review the feed-in-tariffs (FIT) to attract investment
- Provide incentives for investment in non-associated gas resources

Energy Transition Plans

- Target carbon neutrality by 2060
- Use natural gas as the transition fuel
- Off-grid diesel and petrol generators largely contribute to carbon emissions
- Attain Universal Access by 2030
  - ✓Deploy decentralized RE of 6.3GW to replace diesel/petrol generators
    - Solar Home Systems (SHS)
    - Mini-grids
    - Solar PV + battery systems (industrial sector)
  - ✓Upgrade central grid (T&D) and generation capacity to achieve 42GW
    - 8GW of Solar PV
    - 3GW of Biomass
    - 6GW of Hydro
    - 9GW of Hydrogen by 2040

Legal & Policy Updates

- Constitution has been amended to recognise decentralised energy markets.
- The Electric Power Sector Reform Act has been repealed with the enactment of the Electricity Act.
- Electricity Act imposes mandatory renewable energy targets for generators and distribution companies along with providing a statutory framework for an integrated resource plan.
- Fuel subsidies have been removed.

THANK YOU FOR YOUR ATTENTION!

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