



THE PRESIDENCY
FEDERAL REPUBLIC OF NIGERIA

POWER SECTOR OUTLOOK IN NIGERIA: Governments Renewed Priorities

PROF. BART NNAJI CON, NNOM
CHAIRMAN, PRESIDENTIAL TASK FORCE ON POWER



Background: Nigeria on the World Stage

Nigeria:

- Population is the **seventh** largest in the World, ~150 million people
- The largest of any country in Africa (accounts for nearly **half** the total population of West Africa and **more than 15%** of the total population of the entire African Continent).
- Nigeria's population is not just big but also **growing** at a very fast rate. On the current population estimates produced by the United Nations, Nigeria's population will reach nearly 230 million within the next 20 years.
- **More than 40%** of Nigeria's population is less than 15 years old.

In a nutshell, Nigeria has a large and energy hungry population.

Background: Nigeria on the World Stage

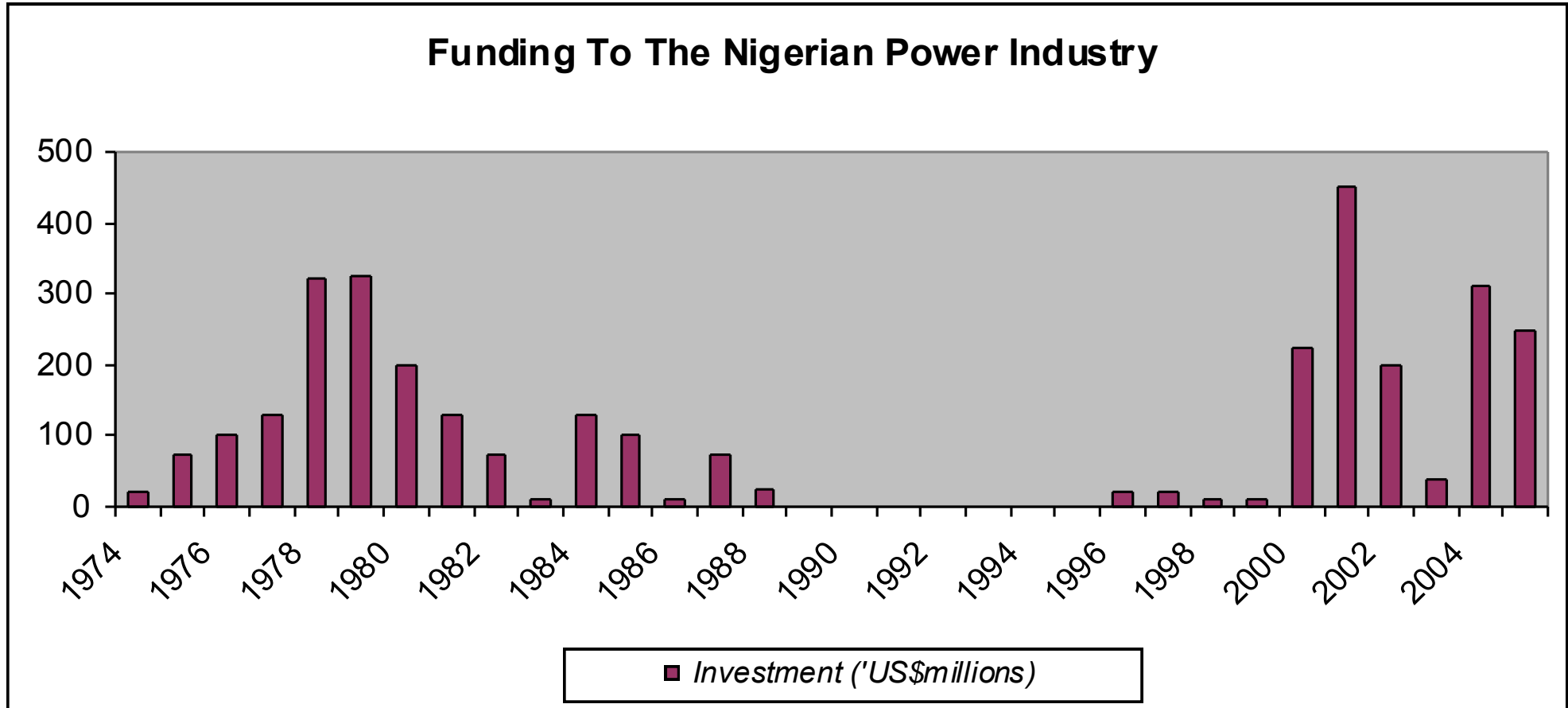
Country *	Generation Capacity (GW)	Watts per capita
S. Africa	40.498	826
Egypt	20.46	259
Nigeria	5.96	40 (25 available)
Ghana	1.49	62
USA	977.06	3,180
Germany	120.83	1,468
UK	80.42	1,316
Brazil	96.64	486
China	623.56	466
India	143.77	124
Indonesia	24.62	102

Sources:

•World Fact book - <http://www.cia.gov/library/publications/the-world-factbook/index.html>

* Energy Information Administration – www.eia.doe.gov

Background: Pattern of Investments in the Nigerian Power Industry



Source: Presidential Retreat On Power

Background: Current Status of Power Supply

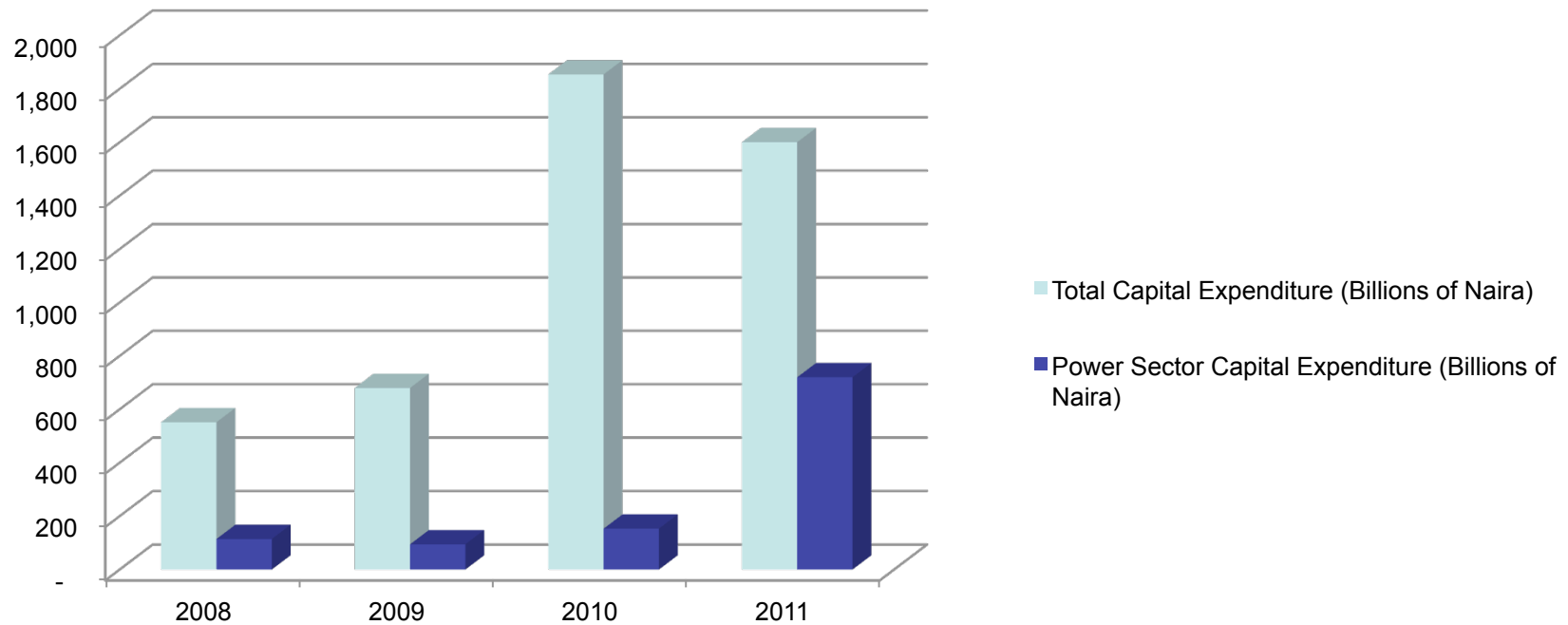
General:

- Only 40% of the nation's population have access to electricity supply
- High operating costs (over N8bn / US\$53m), more than 80% goes into staff salaries and welfare.
- High energy losses (technical and non-technical losses)
- Inadequate expertise
- Distribution and Transmission network has to grow at the rate of at least 16% year on year to handle an equivalent of 13000MW by 2013
- Current average growth rate per annum is less than 1% due to:
 - Limited investments
 - Available investments go into replacements of damaged equipment (transformers, switchgear, etc), instead of going into new constructions for expansion and upgrades

Nigeria Before Power Sector Reform

- Vertically integrated government-owned monopoly that was not commercially viable
- Significant managerial inefficiencies and leakages
- Lack of efficient investment in generation, distribution, and transmission
- Continued increase in load demand vs. virtual static generation level
- High suppressed demand throughout Nigeria

Capital Investment Requirements



- Increasing **Transmission** capacity from 5800MW to over 13000MW by 2013 requires capital investments worth **N200 Billion**(US\$1.4Bn) every year
- Increasing **Generation** capacity from 4200MW to 13000MW by 2013 requires capital investments worth **N520 Billion**(US\$3.5Bn) every year

* 2008-2010 Figures taken from Budget Office of the Federation website

* 2011 total capital expenditure numbers are estimated

The new drive of the Government

- ❑ **Restructure the Industry**
 - ❑ Disaggregate the industry into functional autonomous components of generation, transmission and distribution

- ❑ **Market Development**
 - ❑ Cost Reflective Tariff
 - ❑ Presence of a Strong Regulator

- ❑ **Privatisation**
 - ❑ Active Participation of the Private Sector in the business of the Industry
 - ❑ Outright Transfer of Assets to the Private Sector where applicable

New Framework and Renewed Priorities I

Restructuring of the power sector

- Electric Power Sector Reform Act enacted in 2005 to drive reform process
- Sector regulator (NERC) established October 2005
- Power Holding Company of Nigeria unbundled into **Transmission Company of Nigeria (TCN), 6 GenCos and 11 DisCos**
- Private sector participation introduced with NERC licences PHCN and IPPs

New Framework and Renewed Priorities II

- New **Power Sector Roadmap** officially launched by Mr. President on 26th August, 2010
- Outlines government's plan to **accelerate** the pace of reforms and improve on short term service delivery
- Presidential Action Committee on Power (PACP) created to remove “red-tape, ” achieve policy consistency and cut-through bureaucracy in decision making by key stakeholders in power
- Presidential Task Force on Power (PTFP) created for day-to-day planning, developing and driving forward the Reform Plan for the Nigerian Power sector

New Framework and Renewed Priorities III

- The Reform of the Nigerian Electricity Supply Industry involves the divestment of governments core interest
 - ✓ Power Generation; the privatization of all government owned thermal power plants
 - ✓ Power Transmission; Government retains core ownership but private sector management
 - ✓ Power Distribution; the transfer of ownership of the distribution companies to the private sector

All these are in accordance with the Electricity Power Sector Reform Act 2005

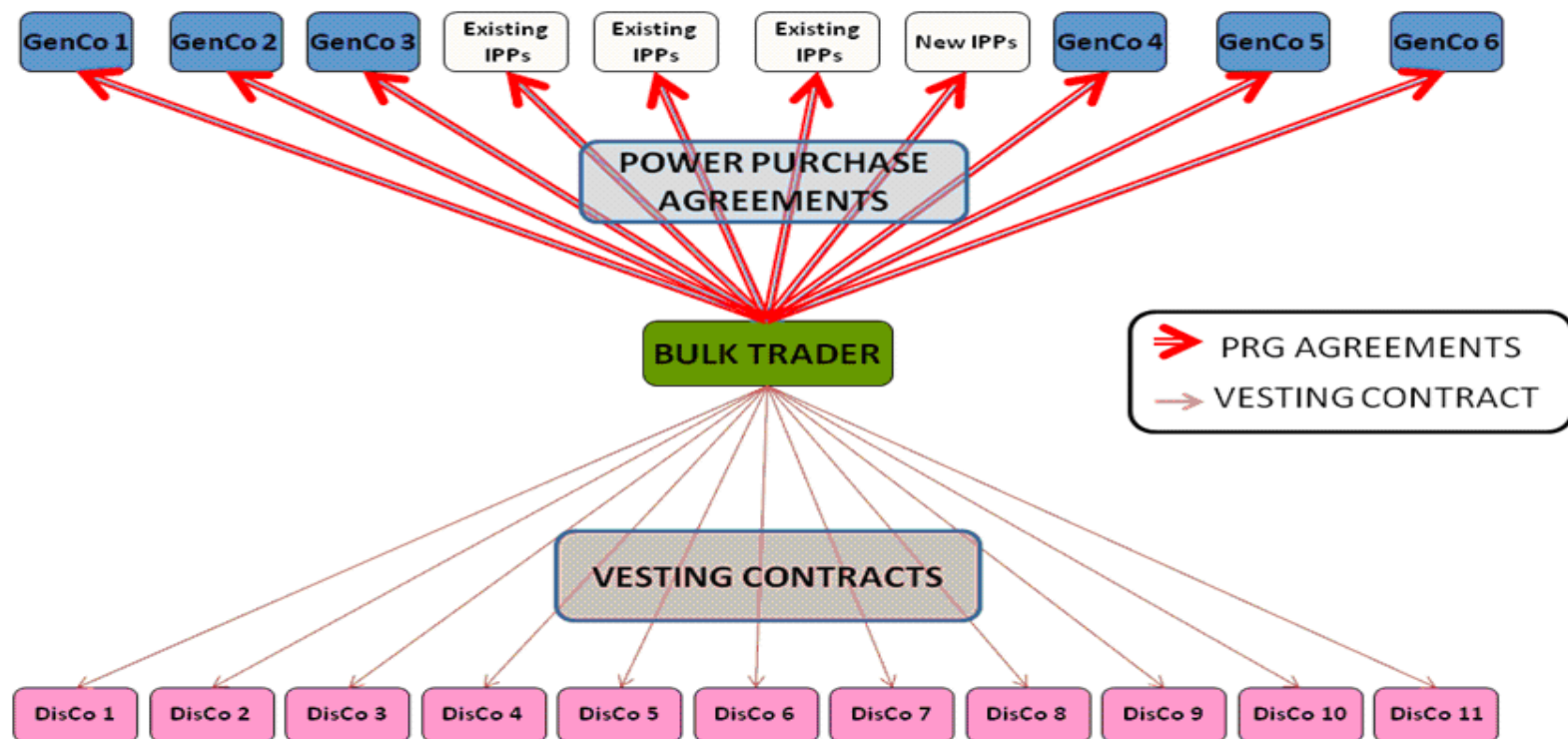
Turning Words into Action I

- Strong, market-oriented Industry Regulator- NERC (constituted)
- Cost reflective tariff to be introduced by NERC
- Incentivizing tariff for gas introduced for 2010, 2011, 2012, and 2013 plus (now in place)
- Nigerian Electricity Liability Management Company (NELMCO) to take over PHCN stranded assets and liabilities
- Bulk Trader (NBET) established as a broker between the power producers and DisCo's. It is a creditworthy counterparty to execute PPAs for at least 5000MW, backed by World Bank PRGs

Reform and the Bulk Trader

The sale of the **Gencos** and **Discos** is dependent on the operationalisation of the Bulk Trader. Investors will not sign a Sale and Purchase Agreement until they have a counterparty with whom they can contract. At this stage in the evolution of the electricity market, bilateral contracts between power producers and distribution companies are not possible. Only a bulk trader (with the ability to sign PPAs backed by bankable guarantees) can bridge this gap.

Bulk Trader as an Interim Central Purchaser



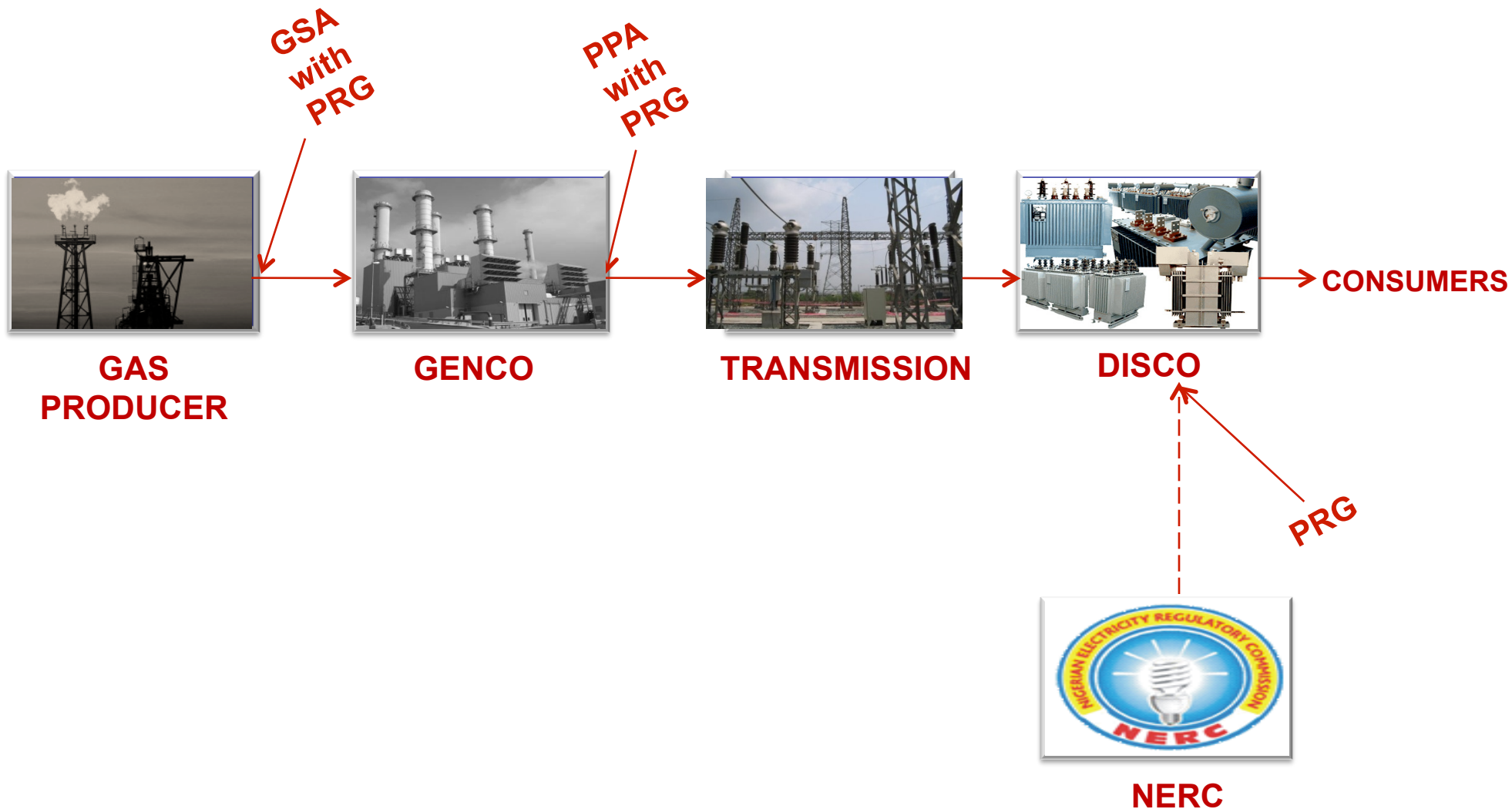
Turning Words into Action II

- **Presidential Will to progress Power Reform (samples):**
 - President's launch of Power Reform Roadmap with clear policy
 - N57bn paid for monetized benefit arrears of PHCN workers – (Aug. 2010)
 - Appropriation of further \$900 million to pay severance upon privatisation
 - Focused Weekly meeting on Tuesdays at 11am chaired by the President
 - Empowerment of National Council on Privatisation to progress power sector reform
 - Very successful Presidential Retreat for Power Sector Investors (Oct.2010)
 - Very successful power investor road show in selected cities of the world
 - Strong interest from financiers and operators all around the world

Turning Words into Action III

- Privatisation of successor companies now underway : Procurement of Transaction Advisers completed, EOI's have been received, evaluated and shortlisted.
- TCN to have management contract in place by end of Quarter 3, 2011
- **And there's more.... To further incentivize the private sector**
 - 700kV Super Grid given go ahead and will be implemented by the new TCN management
 - Central Bank of Nigeria N300bn Aviation and Power Sector Fund
 - Ministry of Finance is providing credit support through the World Bank's PRG scheme to support Bulk Trader power purchase transactions

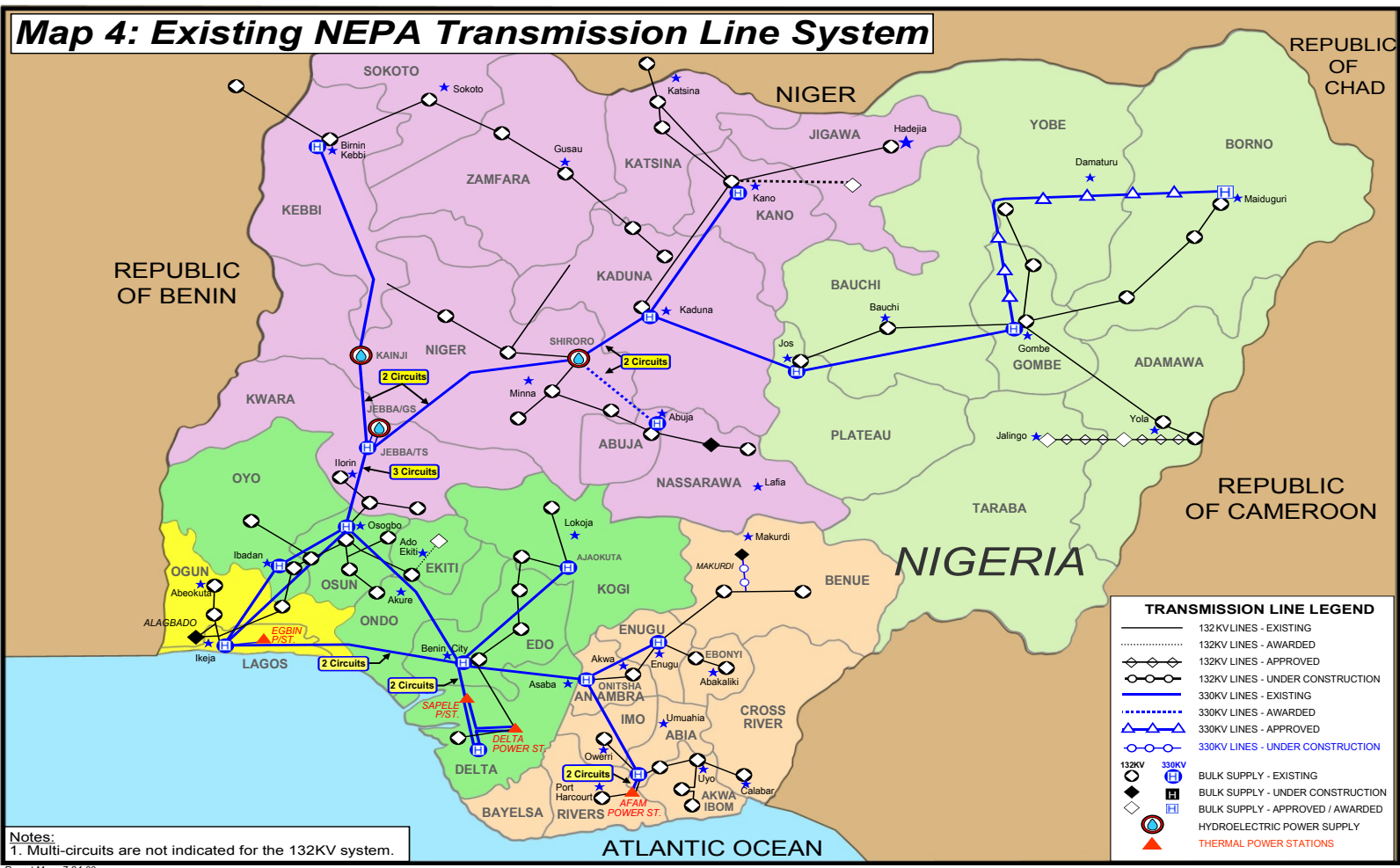
Partial Risk Guarantee Scheme across the Power Sector Value Chain



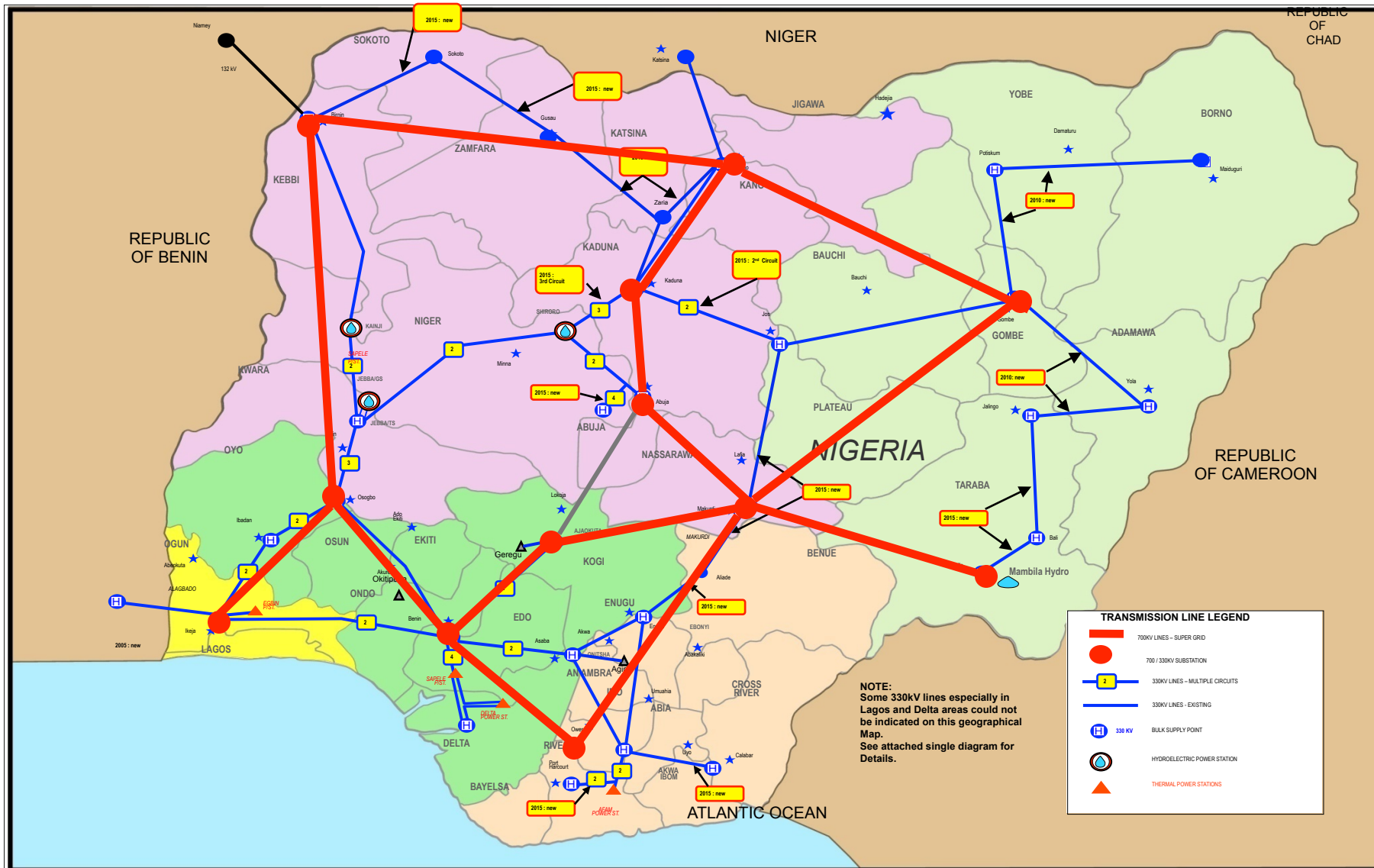
Opportunities in Generation:

- Opportunities for investment is gas production and transportation
- Coal deposit development and mining opportunities
- Ongoing privatisation of generation stations
 - Core Investor Sale of Thermal (gas-fired) Power stations
 - Concessioning of Hydro Power Stations
- New Independent Power Producers
 - Gas fired plants
 - Coal fired plants (NERC has developed preliminary coal plant tariff)
 - Renewable energy (Commission developing feed in tariff and regulation on renewable energy standards)

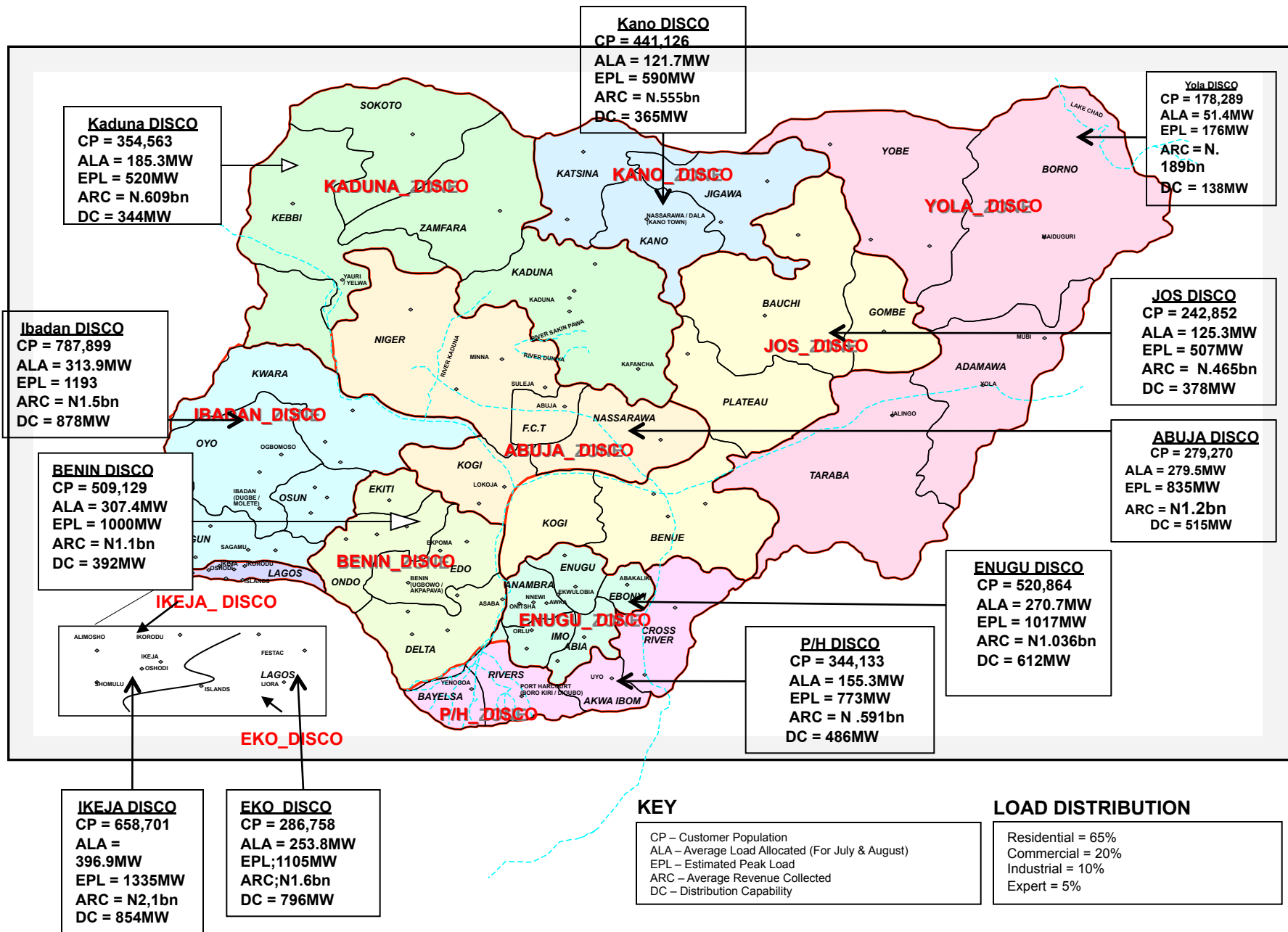
Opportunities in Transmission: Existing Transmission Network



Opportunities in Transmission: Proposed SuperGrid Network



Opportunities in Distribution Companies: Market Statistics



Other Opportunities:

- Local manufacturing of power equipment: switch gears, transformers, cables, etc.
- Technical services

Trajectories for FGN Capital Investments in the NESI over the next 5 years

- **Generation:** Significant reduction over the next 5 years:
 - No more FGN only commitments to new gas-fired power plants;
 - All new gas-fired power plants to be private sector driven;
 - But possibility for continued FGN capital investments (via PPP participation) in coal and/or hydro power plants as well as renewable technologies

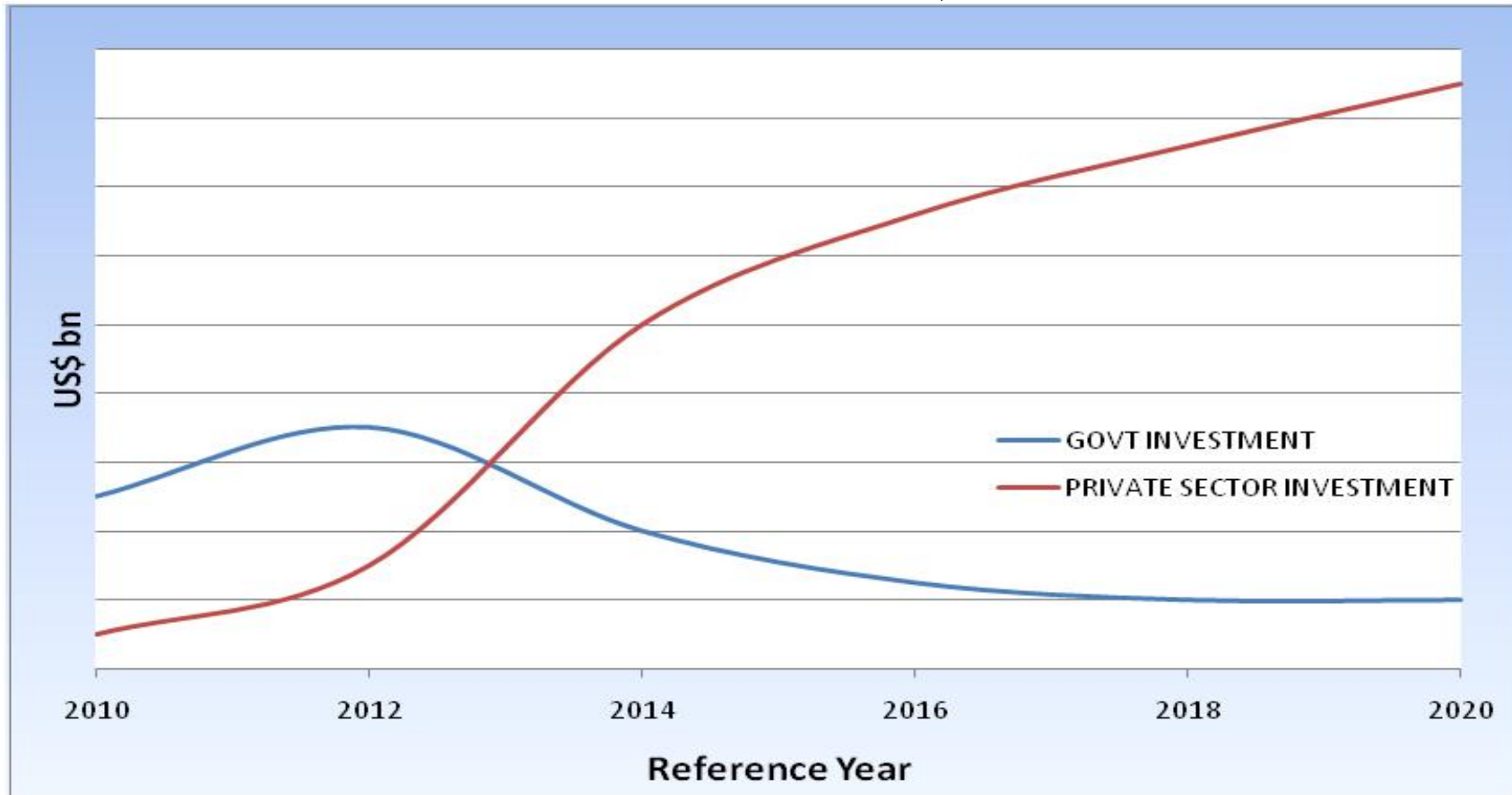
- **Transmission:** Hill-shaped over the next 5 years:
 - Increase in direct FGN investments over the next 2 years;
 - Declining sharply thereafter through shift through funding from wheeling charge.

- **Distribution:** Sharp decline (to zero) over the next 2 years:
 - Via divestment of all unbundled distribution companies.

Government Investment Trend: Generation

Government exits funding gas-fired plants by itself after completing current NIPP phase

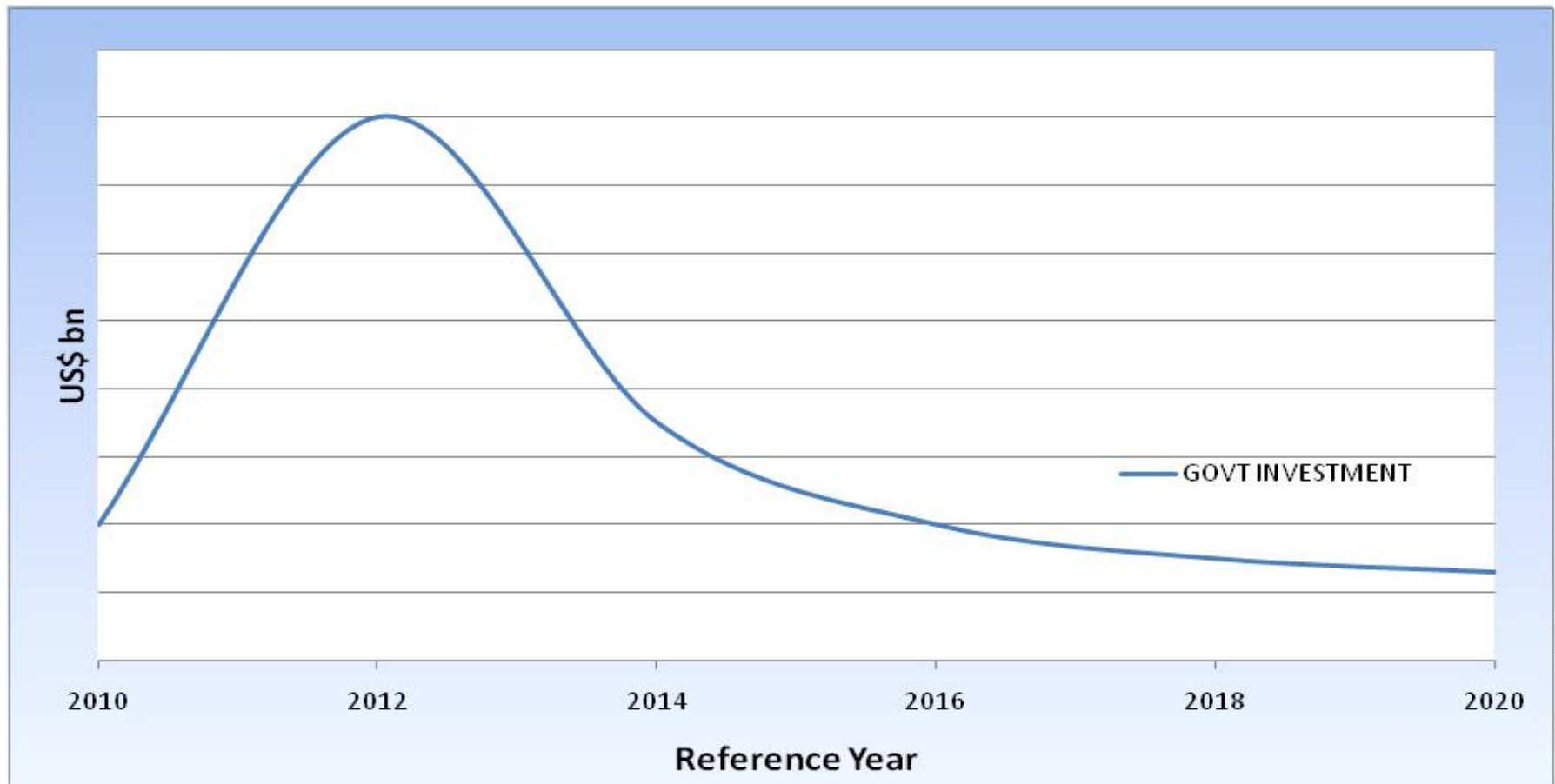
Government continues PPP investment in Hydro, Coal and Renewables



Presidential Task Force on Power

Government Investment Trend: Transmission

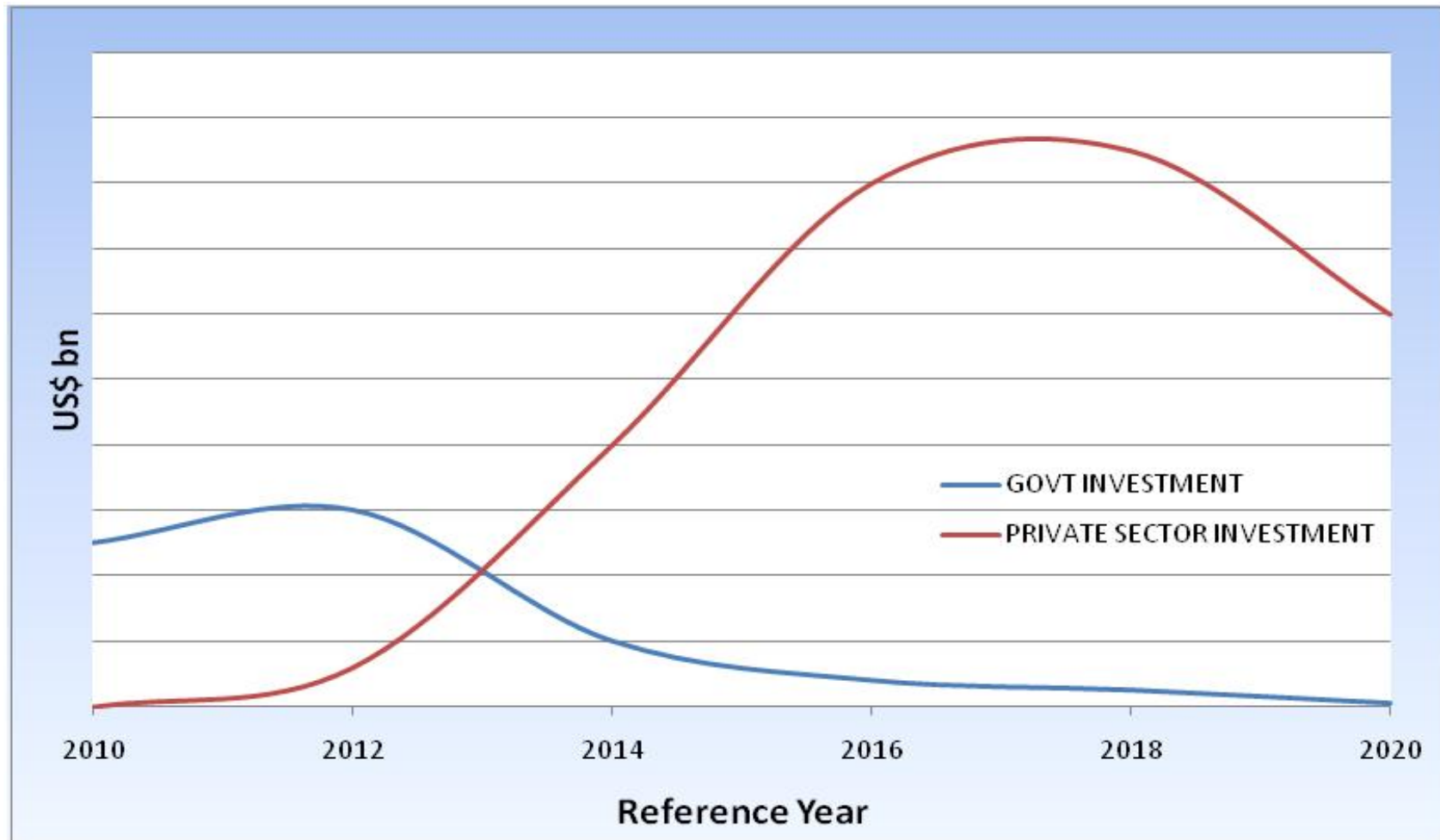
Government initially increases investment in transmission but subsequently commercial wheeling charges will sustain increases under private sector management



Presidential Task Force on Power

Investment Trend: Distribution

Government exits funding of the distribution sector after privatization of DisCos



Presidential Task Force on Power

Summary I

Government's role in the process:

- Development and Deployment of Effective Policy
- Government is asserting its **Will** to carry-through government policy
 - Effective Manager(s) of process implementation
 - Backing managers in decisions that may be unpopular but good for the economy and the populace
 - Educating the public about the benefits of the Policy

Summary II

Private Investors – Exciting opportunities for investment **all the way along the value chain:**

- gas production
- gas transportation
- power generation
- transmission sector
- Distribution
- Support services throughout the value-chain



Thank You

Visit:

www.nigeriapowerreform.org

for further information.

