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ACRONYMS

AfDB	African Development Bank
AICD	Africa Infrastructure Country Diagnostic
ATC&C	Aggregate Technical, Commercial, and Collections
BPE	Bureau of Public Enterprises
Capex	Capital Expenditure
CBN	The Central Bank of Nigeria
CPs	Conditions Precedent
CSOs	Civil Society Organization
DFI	Development Finance Institution
DisCos	Distribution Companies
ELPS	Escravos–Lagos Pipeline System
EPSRA	Electric Power Sector Reform Act
FEC	The Federal Executive Council
FGN	The Federal Government of Nigeria
FMoF	Federal Ministry of Finance
FMoPWH	Federal Ministry of Power, Works and Housing
FX	Foreign Exchange
GDP	Gross Domestic Product
GenCos	Generation Companies
GSAs	Gas Sales Agreements
GWh	Gigawatt Hour
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
IFIs	International Financial Institutions
IPP	Independent Power Plants
IRP	Interim Rules Period
KPI	Key Performance Indicator
kV	Kilovolt
KWh	Kilowatt Hour
LC	Letter of Credit
MAN	Manufacturers Association of Nigerian
MD	Maximum Demand
MDA	Ministries, Departments and Agencies
MDBs	Multilateral Development Banks
MHI	Manitoba Hydro International
MIGA	Multilateral Investment Guarantee Agency
MO	The Market Operator
MW	Mega Watt
MYTO	Multi-Year Tariff Order
NAPTIN	National Power Training Institute of Nigeria
NASS	National Assembly
NBET	Nigerian Bulk Electricity Trading company

ACRONYMS

NDPHC	Niger Delta Power Holding Company Limited
NELMCO	Nigerian Electricity Liability Management Company
NEMFS	Nigerian Electricity Market Stabilisation Facility
NEPA	National Electric Power Authority
NERC	Nigerian Electricity Regulatory Commission
NESI	Nigerian Electricity Supply Industry
NGC	Nigerian Gas Company
NIPP	National Integrated Power Project
NNPC	Nigerian National Petroleum Corporation
Opex	Operating Expense
OVP	Office of the Vice President
PACP	Presidential Action Committee on Power
PCOA	Put-Call Option Agreement
PPA	Power Purchase Agreement
PSRP	Power Sector Recovery Program
PTFP	Presidential Task Force on Power
PV	Photovoltaic
REA	Rural Electrification Agency
SHS	Solar Home Systems
TCN	Transmission Company of Nigeria
TEM	Transitional Electricity Market
TUOS	Transmission Use Of System
WBG	World Bank Group

EXECUTIVE **SUMMARY**

EXECUTIVE **SUMMARY**

What is the Power Sector Recovery Program (PSRP)?

It is a series of carefully thought out policy actions, operational and financial interventions to be implemented by the Federal Government of Nigeria to attain financial viability of the power sector, and, **RESET** the Nigerian Electricity Supply Industry ("NESI").

In summary:
Approval of the Power Sector Recovery Program by FEC. Which comprises of the following activities:

1. Eliminate Accumulated Deficit (2015, 2016);
2. Dimension and commit to fund future sector deficit (2017 – 2021);
3. Ensure Disco performance AND implementation of credible Business Continuity Plans;
4. Establish data driven processes for decision making across the sector;
5. Put measures in place guaranteeing a minimum of 4,000 MWH/H of averaged daily energy;
6. Develop and implement a communication strategy for the implementation program;
7. Develop and implement a robust loss reduction plan e.g. metering
8. Ensure MDA debts are paid and implement payment mechanism for future bills;
9. Restore Sector Governance:
    - Put all Boards across the sector in place (NBET, TCN, NELMCO, NDPHC, REA, BPE);
10. Increase electricity access by implementing off grid renewable solutions;
11. Develop and implement an FX policy for the power sector;
12. Make electricity market contracts effective;
13. Implement an end user tariff trajectory ensuring cost reflective tariffs are achieved over 5 years.

EXECUTIVE **SUMMARY**

2005: Enactment of the Electric Power Sector Reform Act (EPSRA)

2005 to 2007: Establishment of NERC; formation of PHCN; unbundling of the PHCN into 18 independent companies

2008 to 2009: MYTO; The Power Sector Reform Committee was formed

2010:
The PACP and the PTFP were established; the Roadmap for Power Sector Reform was released; the Bulk Trader was established

2012:
MYTO 2 was approved and released

2013:
Privatization of the generation and distribution subsectors; the transmission subsector was retained by Government and operated under a management contract (by MHI).

Interim Rules Period (IRP) and the accumulation of N213 Bn arrears/debt (to be repaid by NEMFS facility which includes N14B for legacy gas debt)

2015:
Feb: MYTO 2.1 was approved and released. Petitions by various consumer groups, evoked by electricity price increases of up to 80%, led to amendment of MYTO 2.1 and a price drop of ~25%

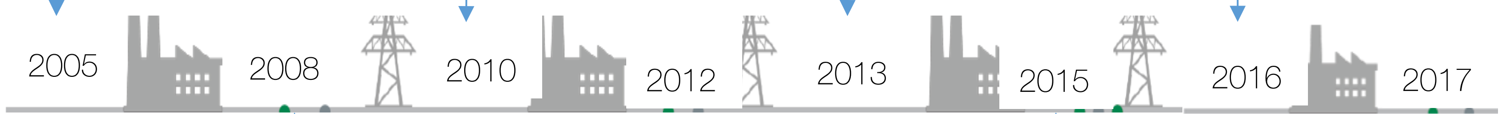
Commencement of TEM, after NERC declared all Conditions Precedent listed in the market rules as satisfied (1st of February)

March to June: Major Disruption to ELPS throughout year.

Dec: NERC Commissioners term expires.

2016:
Feb: MYTO 2015 became effective

Mar: Major Disruption to ELPS throughout year
May: Naira revaluation (Retail Tariff Unchanged)
Jun: No MYTO Review (Retail Tariff Unchanged)
Dec: No MYTO Review (Retail Tariff Unchanged)



2017:
Feb: NERC Commissioners sworn in

MARCH: APPROVE POWER SECTOR RECOVERY PROGRAM (PSRP)

EXECUTIVE **SUMMARY**

Key Points:

1. The sector is in transition from government to private-sector owned and operated. Therefore, it is facing liquidity challenges arising from consumers' orientation to pay only for what they use, transitional learning, regulatory compliance, forex rate changes and vandalism of power assets that affect production stability and breeds consumer resistance to payments.

2. The sector shortfall is inevitable at this tariff level, even with zero collection losses – i.e. it is therefore paramount that government provides a subsidy (or similar mechanism) to offset the expected shortfall.

3. The longer it takes to increase tariffs, the larger the market shortfall grows.

4. The market shortfall for 2015 and 2016 is estimated at ₦473 billion while the tariff shortfall is approximately ₦458 billion.

5. The sector will require approx. $1.5 billion annually for the next five years (2017 to 2021) to achieve sector viability with viability predicated on taking the steps outlined in the PSRIP.

6. The national economy is losing $29.3 billion annually, due to the lack of adequate power.

7. A TCN CEO has been appointed to restructure the company.

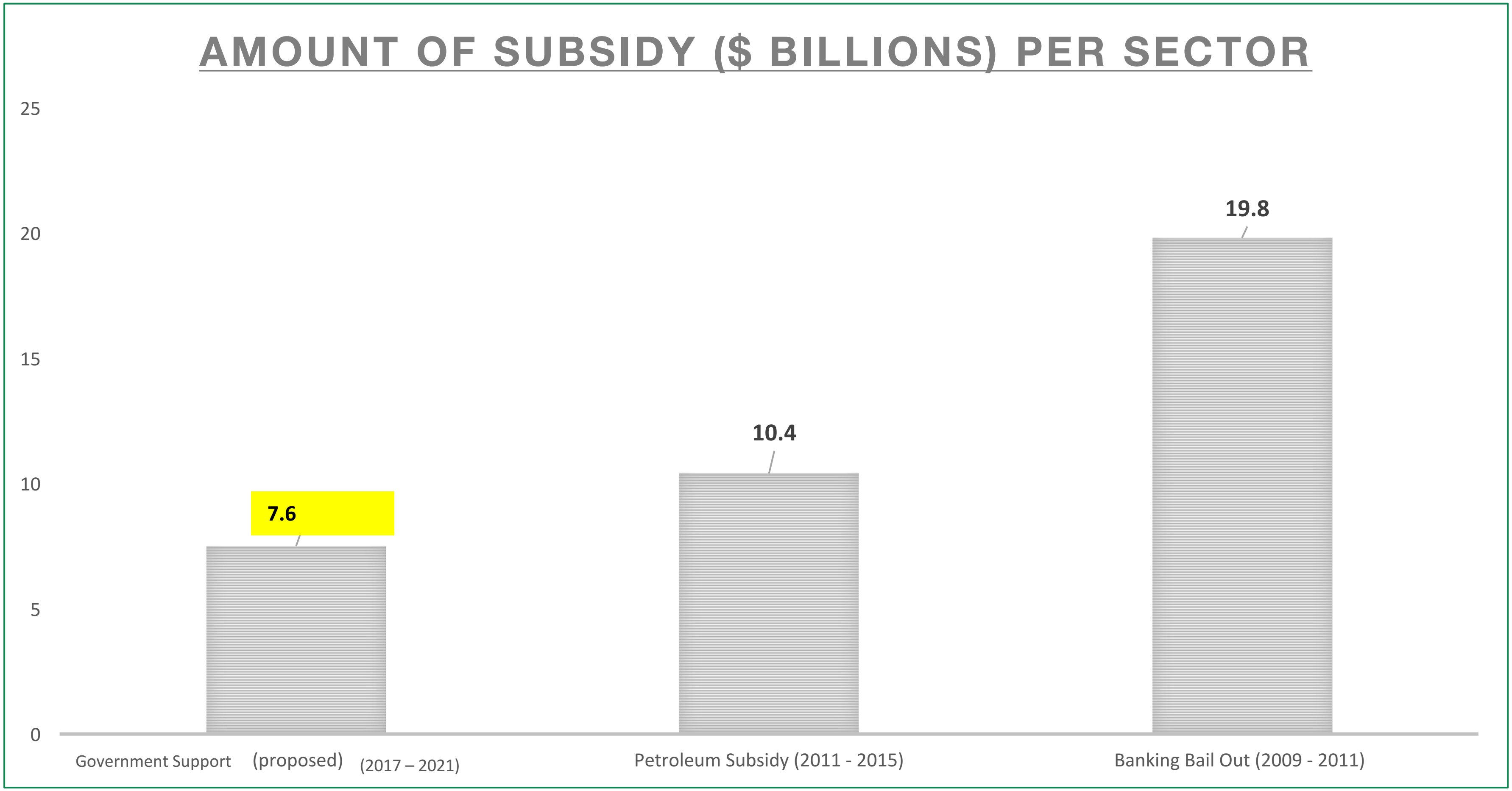
8. The FEC approved ₦701 billion CBN facility for NBET on the 1st March 2017. At this meeting, the FEC also approved that FGN continue discussions with the World Bank Group (WBG) with the objective of securing financial support of c.$2.5 billion for the power sector.

9. After discussions with the WBG, the Power Sector Recovery Program was created.

10. **This document is the Power Sector Recovery Program (PSRP).**

EXECUTIVE **SUMMARY**

Proposed Power Sector Government Support Vs Other Sector Subsidy(s)



EXECUTIVE **SUMMARY**

As part of the Power Sector Recovery Program (PSRP) a detailed action plan has been developed with clear tasks and timeframes for the Federal Government, Office of the Vice President and the following institutions:

1. Federal Ministry of Power, Works and Housing
2. Federal Ministry of Finance
3. Federal Ministry of Petroleum Resources
4. Central Bank of Nigeria
5. Nigerian Electricity Regulatory Commission
6. Bureau of Public Enterprises
7. Nigerian National Petroleum Corporation
8. Niger Delta Power Holding Company
9. Nigerian Bulk Electricity Trader
10. Transmission Company of Nigeria
11. Nigerian Electricity Liability Management Company (NELMCO)

INTRODUCTION

INTRODUCTION

BACKGROUND

The power sector's reforms started with the publication of the National Electric Power Policy in 2001, followed by the Electric Power Sector Reform Act of 2005 (EPSR Act) that unbundled the National Electric Power Authority (NEPA), and, created eighteen (18) successor corporate entities six (6) GENCOs, eleven (11) DISCOs and TCN. Amongst others, two key new institutions were established: the Nigerian Electricity Regulatory Commission (NERC; created in 2005), as the sector regulator and the Nigerian Bulk Electricity Trading company (NBET; created in 2010) as the bulk electricity trader. The privatization of the DISCOs and GENCOs was completed in November 2013 whilst the transmission company, TCN remained under the control of the Ministry of Power. FGN still retains 40 percent ownership in the DISCOs. Three of the five thermal GENCOs were sold in their entirety to the private sector while FGN retains 51 percent in one and 30 percent in another. The Hydropower plants (Kainji, Jebba, and Shiroro) were concessioned.

Following its privatization in November 2013, the power sector was expected to evolve in 4 stages: (i) the Interim Period, which started in November 2013 and characterized by the allocation of sector cashflow deficits across all market participants before expected tariff reviews; (ii) the Transitional Electricity Market (TEM), characterized by NBET's active trading of power – as a buyer from GENCOs and a seller to DISCOs; (iii) the Medium Term Electricity Market, characterized by direct trading between GENCOs and DISCOs (NBET ceases to exist at this stage); and (iv) the Final Market, with bilateral contracts between electricity buyers and sellers at all levels, and, a central balancing mechanism through the creation of a spot electricity market. Due to a number of challenges, the reforms are still at the TEM stage.

Since privatization in 2013, the Nigerian power sector has experienced major set-backs resulting in the financial distress of many of the sector's participants

The sector is in a state of emergency which could cause further deterioration in power supply and the failure of the power sector reform program, that will severely constrain the country's ability to revive growth and restore confidence for private investments. The Ministries of Power and Finance believe that urgent, deliberate and decisive actions are needed to get the sector back on track. The two Ministries acknowledge that most of the GENCOs and DISCOs may essentially be insolvent.

The FGN has since approved ₦701 billion CBN facility for NBET on the 1st March 2017. FEC also approved that FGN continue discussions with the World Bank Group (WBG) with the objective of securing financial support of $2.5 billion for the power sector.

In view of the urgent need to address the dire challenges within the NESI, this Power Sector Recovery Program (PSRP) has been developed.

INTRODUCTION

Key Objectives of the PSRP:

(i) to improve power supply reliability to meet growing demand;
(ii) to strengthen the sector's institutional framework and increase transparency;
(iii) to implement clear policies that promote and encourage investor confidence in the sector; and
(iv) to establish a contract-based electricity market.

Key Deliverables:

- Dimensioning Accumulated Deficit (2015, 2016) and Future Shortfall (2017-2021)
- Developing Mechanisms for Settlement of Accumulated Debt
- Developing Interventions to Minimize Subsidy Going Forward
- Restoring Sector Financial Viability
- Ensuring DisCo Loss Reductions
- Identifying Funding Sources
- Addressing Infrastructure Gaps
- Addressing Gas Pipeline Vandalism
- Enabling Electricity Market Business Continuity
- Developing a Communications Strategy for Stakeholders

Components of the PSRP Work Plan:

1. Financial analysis
   - Review and analysis of the accumulated deficit with attribution across the value chain and according to the different factors
   - Development of sector financial simulation model which will focus on cash/debt flow analysis encompassing all market participants and make projections into the medium term.
   - Financial analysis of DISCOs and GENCOs: based on audited financial statements, management accounts and NERC KPI submissions

2. Regulatory strengthening and public communication
   - Tariff methodology review and tariff/subsidy scenario analysis
   - Requirements for PPA and Vesting Contracts activation
   - Interim management arrangements for private companies reverting to public ownership
   - Development of communications strategy for implementation of the PSRP

3. Financing of the recovery program
   - Review of the linkage of macroeconomic policy framework
   - Fiscal space analysis for funding the implementation of the recovery program
   - Prior actions (conditions precedent) to approval and disbursement of a potential energy development policy operation funded by World Bank and other IFIs

The Nigerian economy entered a recession in Q2 2016, recording four consecutive quarters of negative economic growth, with full year growth of -1.51%.

Economic contraction exposed structural weakness in Nigeria's growth model; a consumption based growth model fuelled by oil revenues.

This hid economic vulnerabilities arising from an underinvestment in infrastructure and the non-oil sector, exposing the economy to global oil shocks and capital flow reversals.

This led to:

- Declining Government revenues (Federal and State Government);
- Declining foreign exchange reserves at US$25.8 bn in Q4 2016;
- Consistently rising inflation at 18.7% in Q4 2016;
- Rising rate of unemployment at 13.9% in Q3 2016; and
- Overall weak consumer demand, weak government and private sector investment as well as rising cost of production inputs.

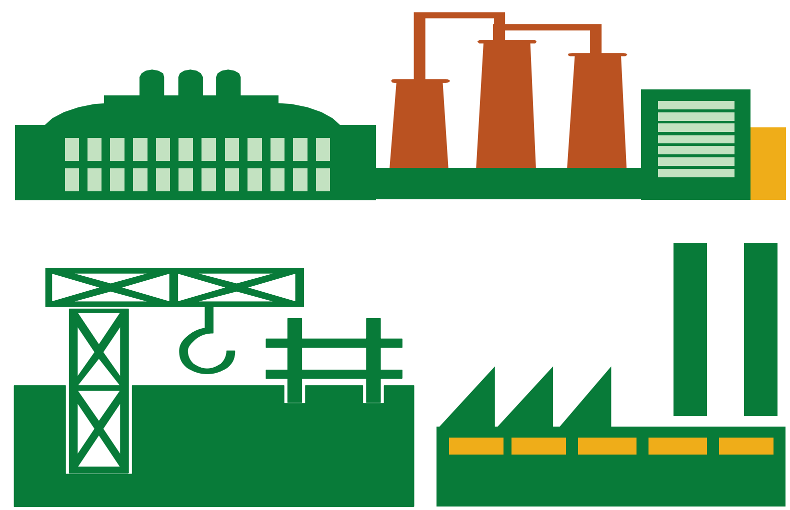
Macroeconomic Outlook for 2017

The implementation of the PSRP will support the Nigerian macroeconomic outlook for 2017.

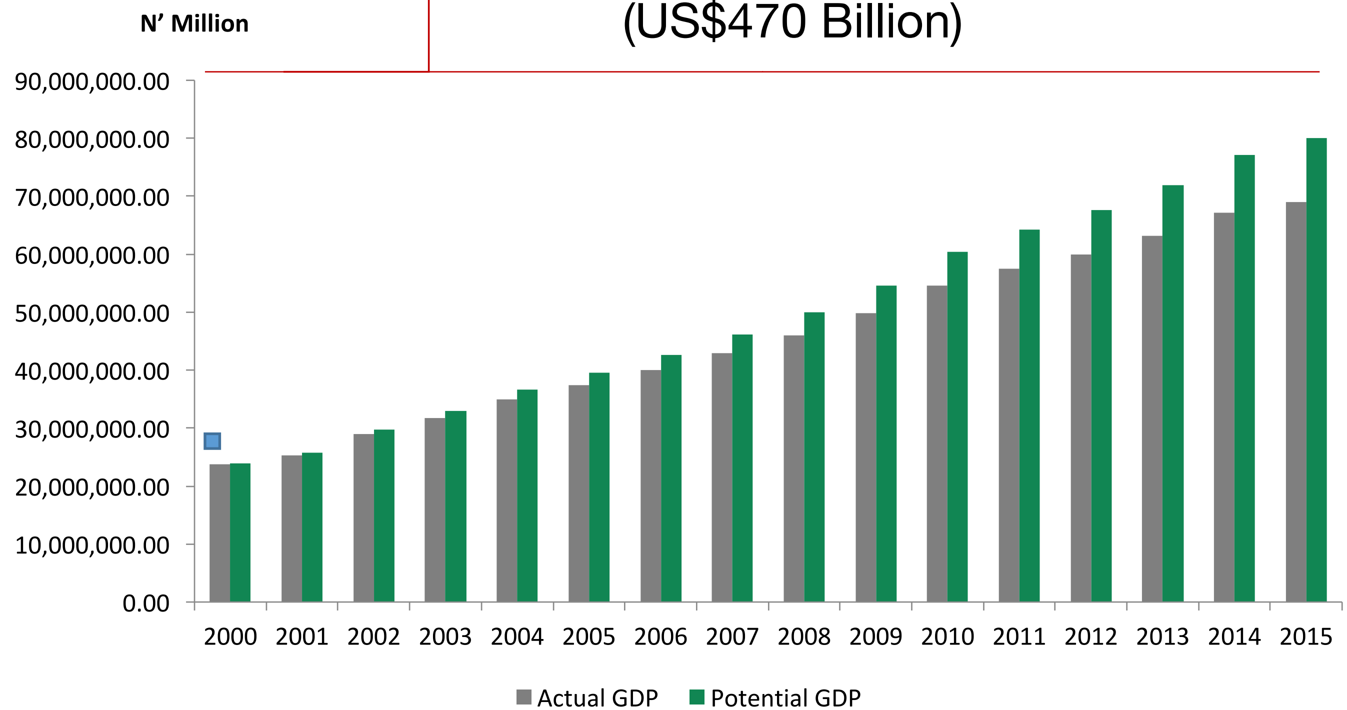
- ☑ Target positive real GDP growth of 2.5% in 2017.
- ☑ Infrastructure development to drive economic growth.
- ☑ Diversification of economy and growth of non-oil sector.
- ☑ Improvement in overall business environment.
- ☑ Improvement in key socio-economic indicators.

- Electricity consumption and economic development are correlated. Poor performance of the power sector is seen as the key constraint to economic development.
- A poorly diversified energy mix where the majority (85%) of installed capacity is fueled by gas.
- Investment in the publicly-owned power sector seriously diminished by the early 1990s, with maintenance budgets greatly reduced and no new capacity added.
- At approx. 120kWh per capita, Nigeria lags far behind other developing nations in terms of on-grid electricity consumption.
    - Based on the country's GDP and global trends, electricity consumption should be four to five times higher than it is today according to Power Africa.

While analysis has shown that the power sector will require funding of up to **$1.5 Billion** annually, going forward, funding of the power sector will enable diversification of the economy and is estimated to drive growth by at least **$29.3 Billion** annually.

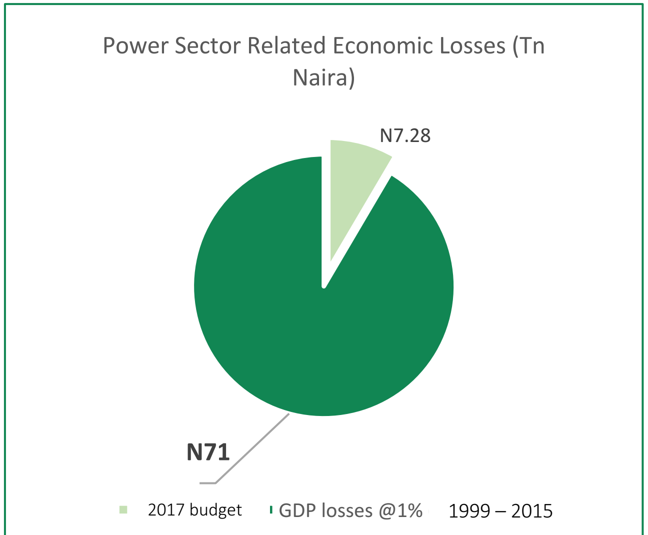


Total Loss in GDP over 16 years: ₦71 Trillion (US$470 Billion)



Estimated loss in GDP between 1999 – 2015 Compared to 2017 Budget:

- @ 1% loss = 10 x Nigeria's 2017 Budget
- @ 2% loss = 20 x Nigeria's 2017 Budget



According to the World Bank's Africa Infrastructure Country Diagnostic (AICD) and a 2015 McKinsey report, African countries are losing 1% of GDP per annum due to poor power infrastructure - Nigeria estimated GDP loss from 1999 to 2015 is N71 trillion due to under investment in power infrastructure.

THE **CHALLENGE**

THE CHALLENGE

Market Indiscipline - The following table shows the amounts collected from their customers, DisCo Opex as per MYTO model, payments to NBET & MO, and the amounts retained by DisCos.

<u>It is very clear that DisCos have retained a lot more for themselves in 2016 compared with 2015.</u>

DisCo Collections vs. Payments to NBET & MO	Billing Collections by DisCos		Opex of DisCos excl PP costs (as per MYTO)		Cash available after meeting DisCos own Opex		Payments to NBET & MO		Cash retained by DisCos after paying NBET & MO		DisCo Collection Rate		Settlement of NBET & MO Invoices	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
	NGN mln	NGN mln	NGN mln	NGN mln	NGN mln	NGN mln	NGN mln	NGN mln	NGN mln	NGN mln				
Abuja	39,476	46,592	11,555	11,882	27,921	34,710	24,409	16,945	3,512	17,765	64%	67%	53%	29%
Benin	25,949	26,988	9,839	9,937	16,110	17,051	17,049	12,376	(940)	4,676	67%	53%	56%	31%
Eko	39,668	45,685	12,215	12,530	27,453	33,154	27,841	19,169	(388)	13,985	73%	74%	83%	52%
Enugu	29,236	30,157	9,759	9,904	19,477	20,253	17,850	12,876	1,627	7,377	62%	59%	47%	26%
Ibadan	40,444	39,872	19,079	19,507	21,366	20,365	30,549	18,410	(9,184)	1,955	63%	62%	69%	34%
Ikeja	44,959	45,629	13,542	13,909	31,417	31,720	25,749	21,115	5,668	10,605	69%	69%	54%	38%
Jos	9,312	10,034	6,924	7,099	2,388	2,935	6,123	4,429	(3,735)	(1,494)	41%	37%	35%	19%
Kaduna	14,401	14,874	8,483	8,642	5,918	6,232	6,483	6,615	(566)	(384)	41%	39%	25%	17%
Kano	13,456	14,972	6,236	6,395	7,221	8,577	6,358	4,672	863	3,905	54%	51%	38%	17%
Port Harcourt	18,434	22,712	6,294	6,444	12,140	16,269	10,730	5,901	1,411	10,368	53%	44%	44%	15%
Yola	4,121	5,409	4,592	4,690	(471)	719	1,809	2,201	(2,281)	(1,482)	57%	51%	30%	19%
Total	279,457	302,925	108,517	110,940	170,940	191,986	174,951	124,709	(4,011)	67,276	61%	57%	53%	29%

Lack of Cost Reflective tariff

DisCo Performance

	ATC&C Losses - MYTO estimates		ATC&C Losses - Actuals as reported by DisCos		Variance - MYTO vs. Actuals		Actual Collections		Collections if MYTO estimates applied		Opex of DisCos excl PP costs (as per MYTO)		PP Costs (NBET & MO)		Remaining cash with Actual Collections		Remaining Cash with MYTO Collections	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
							NGN bln	NGN bln	NGN bln	NGN bln	NGN bln	NGN bln	NGN bln	NGN bln	NGN bln	NGN bln	NGN bln	NGN bln
	A	B	C	D	E	F	G	H	I	J	M	N	O	P	= G-M-O	= H-N-P		
Abuja	46.0%	31.5%	49.5%	46.7%	3.4%	15.1%	39.5	46.6	47.3	60.9	11.6	11.9	46.1	59.3	(18.2)	(24.6)	(10.4)	(10.3)
Benin	47.1%	38.6%	56.2%	54.9%	9.1%	16.3%	25.9	27.0	27.6	40.3	9.8	9.9	30.5	40.5	(14.4)	(23.4)	(12.8)	(10.1)
Eko	26.6%	19.4%	34.7%	33.8%	8.1%	14.3%	39.7	45.7	53.5	61.8	12.2	12.5	33.3	36.9	(5.9)	(3.8)	8.0	12.4
Enugu	38.7%	38.4%	61.0%	61.9%	22.3%	23.5%	29.2	30.2	35.7	40.8	9.8	9.9	38.2	49.0	(18.7)	(28.8)	(12.3)	(18.2)
Ibadan	36.2%	30.4%	48.9%	50.2%	12.7%	19.8%	40.4	39.9	46.5	60.0	19.1	19.5	44.3	54.2	(22.9)	(33.9)	(16.8)	(13.8)
Ikeja	28.0%	20.8%	43.2%	44.5%	15.1%	23.7%	45.0	45.6	53.5	63.8	13.5	13.9	47.6	56.0	(16.2)	(24.2)	(7.7)	(6.0)
Jos	53.9%	48.3%	66.5%	72.9%	12.6%	24.6%	9.3	10.0	14.7	19.3	6.9	7.1	17.4	23.6	(15.0)	(20.7)	(9.7)	(11.4)
Kaduna	47.7%	31.9%	65.9%	68.2%	18.2%	36.3%	14.4	14.9	25.6	34.9	8.5	8.6	25.9	37.9	(20.0)	(31.7)	(8.8)	(11.6)
Kano	44.9%	38.2%	56.9%	58.6%	12.0%	20.4%	13.5	15.0	17.5	23.4	6.2	6.4	16.9	27.9	(9.7)	(19.3)	(5.6)	(10.9)
Port Harcourt	52.9%	45.0%	53.5%	60.2%	0.5%	15.2%	18.4	22.7	20.8	36.3	6.3	6.4	24.3	40.2	(12.2)	(23.9)	(9.8)	(10.3)
Yola	43.8%	32.8%	58.3%	63.2%	14.5%	30.4%	4.1	5.4	5.0	10.9	4.6	4.7	6.0	11.6	(6.5)	(10.8)	(5.6)	(5.3)
Overall	40.2%	32.1%	52.1%	54.3%	11.9%	22.2%	279.5	302.9	347.7	452.5	108.5	110.9	330.7	437.2	(159.7)	(245.2)	(91.5)	(95.6)

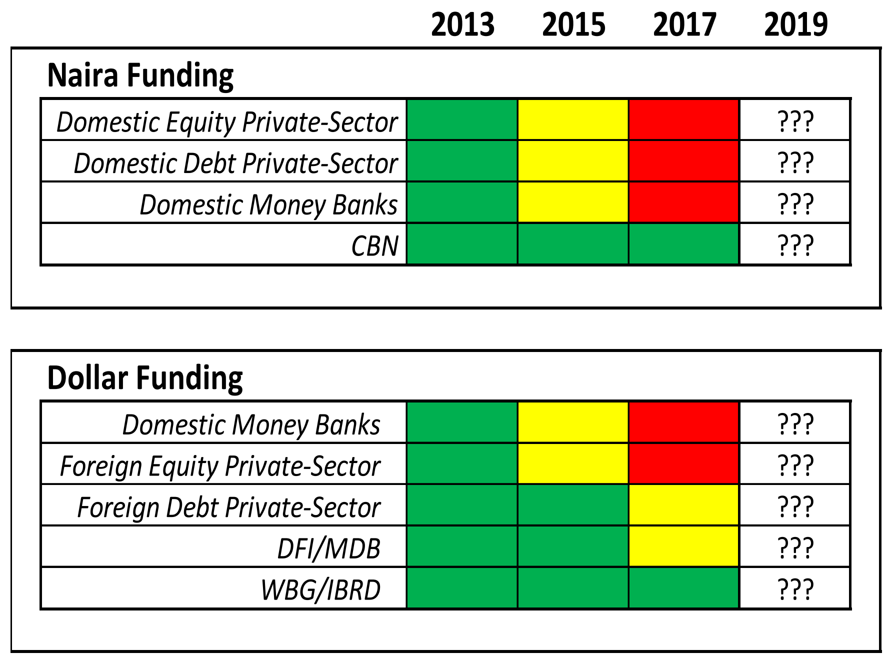
THE **CHALLENGE**

Nigeria Electricity Supply Industry (NESI) – A Loss of Investment Appetite

From being an investment destination sought after in 2013 – both at home and abroad, the NESI has fallen out of favour.

With the recent meetings in Abuja of the DFI/MDBs over issues concerning the currency redenomination of the Put-Call Option Agreement (PCOA), there now remains only 2 dependable sources of financing for the NESI:

NGN – The Central Bank of Nigeria (CBN)
USD – The World Bank Group (WBG)



A bold turnaround plan is now required to utilise current assets and resources optimally, and to restore investor confidence in the sector, required to deliver the planned sector reforms.

THE CHALLENGE

FUNDING REQUIREMENTS

The analysis shows preliminary estimates amount owed to the market due to Tariff shortfall in 2015 and 2016. The table also shows the total amount of funding FGN is required to provide to support the power sector for the next five years (2017 – 2021) based on MYTO loss figures, the following scenario's were considered:

1. **Scenario 1: Tariff increase in July 2017 - ₦1.3 trillion ($4.1 billion)**

2. **Scenario 2: Tariff increase in Jan 2018 - ₦1.7 trillion ($5.4 billion)**

3. **Scenario 3: Tariff increase in July 2019 - ₦2.4 trillion ($7.6 billion)**

4. **Scenario 4: Tariffs increase by 50% in July 2017 for all customer classes except R1, R2 and C1. Tariffs for non-vulnerable R2 will increase by Jan 2018. Tariffs for R1, vulnerable R2, and C1 will increase by July 2019 – ₦1.9 trillion ($5.9 billion)**

Proposed tariff increases with consequent revenue shortfalls (NGN billions)

	2015	2016	2017	2018	2019	2020	2021	2015-2021
Nigeria inflation			17.14%	15.29%	15.46%	14.73%	15.46%	
US inflation			2.34%	2.65%	2.52%	2.50%	2.50%	
Exchange rate at Dec 31			349	392	442	494	557	
Exchange rate (NGN/USD)			327	371	417	468	526	
Generation (GWh)			35,501	38,616	41,818	45,163	48,776	
Generation (MW equivalent)			4,053	4,408	4,774	5,156	5,568	
Scenario 1 (tariff increase in July 2017)	(187)	(270)	(321)	(163)	(205)	(177)	0	(1,323)
Average Retail Tariff (N/kWh)			36.5	48.0	49.0	53.5	63.0	
Average Retail Tariff (USc/kWh)			11.2	13.0	11.8	11.4	12.0	
Scenario 2 (no tariff increase until Jan 2018)	(187)	(270)	(467)	(269)	(286)	(233)	0	(1,712)
Average Retail Tariff (N/kWh)			28.8	44.0	46.5	52.0	63.0	
Average Retail Tariff (USc/kWh)			8.8	11.9	11.2	11.1	12.0	
Scenario 3 (no tariff increase until mid-2019)	(187)	(270)	(467)	(622)	(569)	(251)	0	(2,367)
Average Retail Tariff (N/kWh)			28.8	28.8	36.5	53.5	63.0	
Average Retail Tariff (USc/kWh)			8.8	7.8	8.8	11.4	12.0	
Scenario 4 (tariffs increase by 50% in July 2017 for all customer classes except R1, R2 and C1. Tariffs for non-vulnerable R2 will increase by Jan 2018. Tariffs for R1, vulnerable R2, and C1 will increase by July 2019	(187)	(270)	(411)	(433)	(397)	(183)	0	(1,882)
Average Retail Tariff (N/kWh)			31.8	36.8	42.4	53.6	63.0	
Average Retail Tariff (USc/kWh)			9.7	9.9	10.2	11.5	12.0	

Option 1: Tariffs remain frozen for all customer classes until July 2019. Estimated cost of FGN support is NGN2.4 trillion (NGN US$7.6 billion) over the five (5) year period;

Option 2: Tariffs increase for all customer classes in January 2018. Estimated cost of FGN support is NGN1.7 trillion (US$5.4 billion) over the five (5) year period;

Option 3: Tariffs increase for all customer classes in July 2017. Estimated cost of FGN support is NGN1.3 trillion (US$4.1 billion) over the five (5) year period;

Option 4: Tariffs increase by 50% in July 2017 for all customer classes except R1, R2 and C1. The R2 customer class will be disaggregated and the portion not requiring FGN support (approximated as half) will experience an increase by January 2018. Tariffs for R1, vulnerable former R2, and C1 will experience tariff increase by July 2019. Estimated cost of FGN support is NGN2.3 trillion (US$5.9billion) over the five (5) year period.

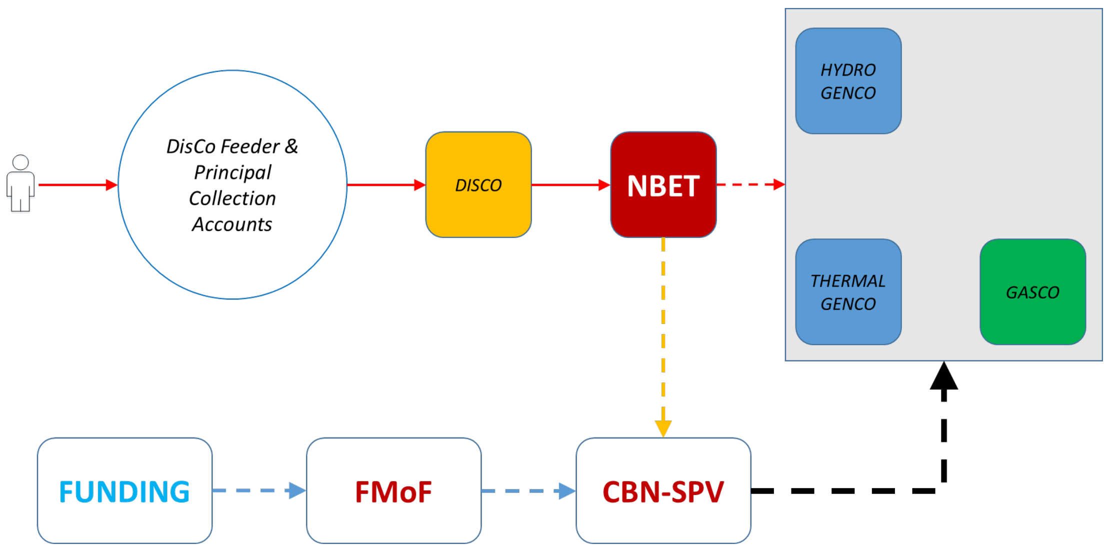
The implication of the implementation of any of these options would be the need for funded subsidies ("Electricity Market Support") valued at up to NGN2.4 trillion (US$7.6 billion) between July 2017 and 2021. The table below shows the Working Group's ranking of the options outlined above based on its views on the political, public and potential financers acceptance of the various options:

S/N	Options	Political Support	Public Support	Funders Support	Amount (US$'bn)	PSRP Ranking
1	July 2019 Tariff Increase	Medium	Medium	Low	NGN2.4Trn (US$7.5Bn)	2
2	January 2018 Tariff Increase	Low	Low	Medium	NGN1.7Trn (US$5.4Bn)	3
3	July 2017 Tariff Increase	None	None	High	NGN1.3Trn (US$4.2Bn)	4
4	Tariff increase July 2017 for ONLY Industrial Customers	Medium	High	High	NGN1.9Trn (US$5.9bn)	1

THE **PLAN**

CBN/ NBET UPSTREAM PAYMENT ASSURANCE PROGRAM

- Sector requirement to guarantee an increasing quantity and quality of power supply power that has been threatened by the repeated inability of NBET to pay generation invoices.
- **Current facility sizing of 701Bn for 2 years**



- CBN provides funds to NBET for payment assurance to upstream.
  - *Assures % of Payment of Energy Invoice: 'Capacity Plus Energy Delivered'*
  - *Assures % of Payment to GenCo Creditors – GasCos & Banks*
- Critical set of Conditions Precedents to improve DisCo Remittances/Market Invoice Performance
- NBET verifies payment invoices and assurance & activates Upstream Contracts.
- Federal Ministry of Finance (FMoF)/FGN provides CBN repayment guarantees.
- Program Reduces Market Shortfall by Assuring GenCo Performance whilst Improvements are made to DisCo Remittances.

RESOLUTION OF **HISTORIC OBLIGATIONS**

1. **DisCos debts to upstream (Market shortfall) c. 470Bn.**
    - Verification of historic invoices with interest charges and FX effects (NERC, NBET, MO)
    - Payment of verified obligations (FMoF, NBET)

2. **FGN debt to DisCos (Tariff shortfall + Actual Remittances) c. 460Bn NGN**
    - Determination of DisCo Compensation/Obligations (NERC)
    - Payment of verified obligations to DisCo Creditors (FMoF, NBET).
    - Determination of repayment mechanism for DisCo Debtors (NERC)
        - Tariff Methods (NERC)
        - Loan facilities (CBN)
        - MDA Credits

3. **MDA Debts to DisCos.**
    - Verification of historic invoices and physical locations (OVP)
    - Payment of verified obligations to DisCos (FMoF, CBN).

GOING FORWARD

- Continuous Monthly Monitoring of GenCos', DisCos', and Service Providers' market balances (NERC)
- Centralized MDA Payment System (CBN, FMoF)

INTERVENTIONS REQUIRED TO MINIMIZE SUBSIDY GOING FORWARD

1. **Tariff Review**: Approach cost reflective tariff over a short period – 5 years, maximum; this reduces the size of the revenue shortfall FGN will need to finance / subsidize.
2. **Aggressive ATC&C Loss reduction**: Incentivize DisCos adequately to reduce losses. This should increase the quantity of electricity delivered to homes – which should increase sector revenues/cash flows. Specifically:
   - ✓ **Capex for metering, transformers**: Cheap, long tenured loans from WB/MDB's required to FastTrack
3. **Fully funded subsidy ("Project Finance" approach)**: Subsidies that are not funded become even larger problems in the future. Ensuring the projected subsidy is fully funded upfront eliminates this risk and reduces the subsidy requirement overall.
4. **Transparency:** Increase transparency on revenues and costs, starting with maximum demand (MD) customers (this should be fully automated and cashless).
   - ✓ Put a technology platform in place to settle sales and payments for MD and similar customers
5. **Enforcement of market regulations on**:
   - ✓ ATC&C loss reduction;
   - ✓ Power theft;
   - ✓ Metering; and
   - ✓ Penalties.

OFF GRID RENEWABLE SOLUTIONS – ACCESS & RURAL ELELECTRIFICATION

Component	Description
Rural Mini Grids	Electrification of unserved and under-served areas that have high economic potential. The focus will be on solar-based mini grids, which can be rolled out quickly, and later be integrated with DisCos.
Stand-Alone Home Solutions	Provision of Solar Home Systems (SHS) and solar lanterns, amongst other products, for areas where mini-grids are not viable. The stand-alone solutions may include individual photovoltaic (PV) systems that can provide sufficient electricity to satisfy the needs of households and small commercial enterprises (e.g., for lighting, radio, TV, fan, DC fridge).
IPPs for federal universities and teaching hospitals	The lack of access to reliable power supply is a major barrier to effective learning, institutional operations and student residency in Nigeria's federal universities. The focus of the Energizing Education program objective is to provide sustainable electricity supply to 37 federal universities and 7 university teaching hospitals across the country (including street lighting for illumination and security of campuses). The power will come from off-grid systems ranging from 1MW to 10MW.

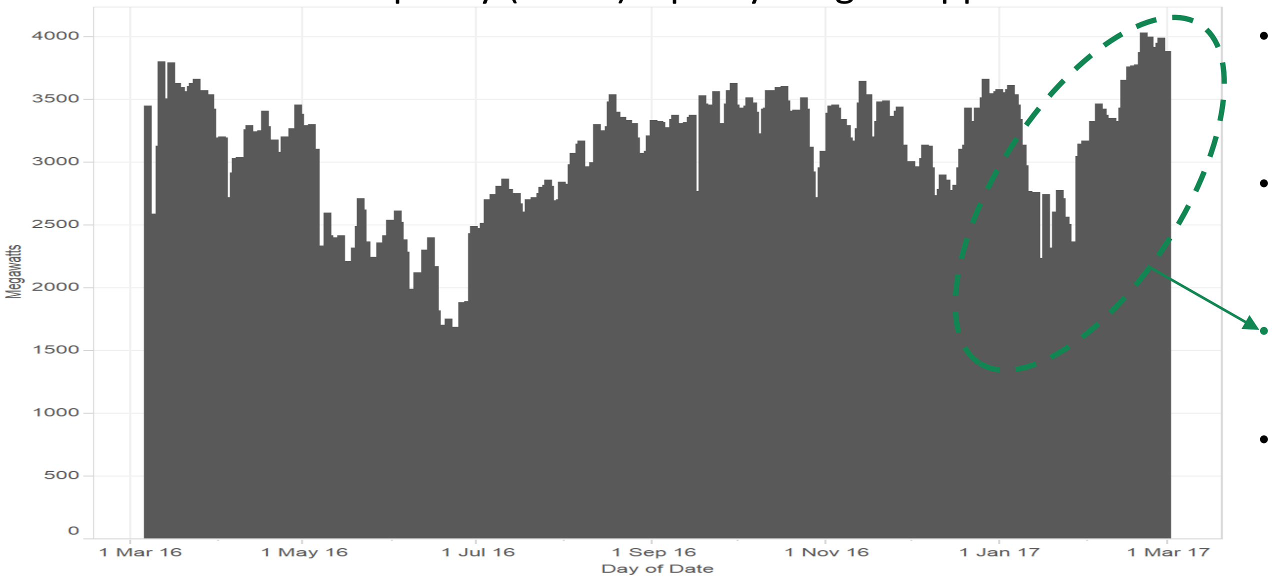
ADDRESSING TRANSMISSION **INFRASTRUCTURE GAPS**

- An engineering firm was hired to conduct a transmission infrastructure gap analysis for Nigeria's power grid – before and after the 22 priority projects included in the Ministry of Power's 2017 budget.
- The grid has 5,500 MW of transmission capacity currently and will have up to 7,000 MW once the projects are commissioned. In summary:

Transmission Segment	Status
Gas Generation Evacuation	• All 330 kV connected gas generation plants can be evacuated with no power station specific transmission constraints • Some constraints at the 132 kV level, particularly in the Lagos area.
Current Loadflow & Post-Project Loadflow	• The grid has the capacity to wheel: ✓ 5,500MW of generation capacity before the priority projects; ✓ Up to 7,000 MW with the projects (from 2018, assuming projects are commissioned in 2018) ✓ Adequate funding required for preventive and corrective maintenance

ADDRESSING **GAS PIPELINE VANDALISM**

Generated Capacity (MWh) – proxy for gas supplied



- Gas supply has been volatile – mostly decreasing – since the resumption of militant activity in the Niger Delta early 2016;
- Gas supply dropped by as much as 50% (with generation capacity dropping to 1,700MW in July 2016);
- Gas production has increased 30% since the VP's visit to the region in November 2016;
- The VP's visit was the first of FGN's 5-pronged strategy of active engagement in the Niger Delta to curb gas pipeline vandalism.

FGN's engagements with the Niger Delta to curb gas pipeline vandalism

1. **Nov 2016**: high level political engagement led by the VP to reaffirm FGN's commitment to the region;

In the Future:

2. **Strategic level engagement** led by His Excellency, The Vice President with Minister of State for Petroleum and 9 state governors to identify critical development priorities for each state in the region;
3. **Operational and programmatic engagement** by representatives of various MDAs, including the Office of the Vice President to convert the region's development priorities into specific projects;
4. **Ownership stakes by host communities** in oil and gas assets will make them guard their assets; and
5. **Engaging host communities** to secure assets in their townships.

Possible interventions for DisCos to focus on aggressive loss reduction:

- It is important to hold operators accountable to performance benchmarks in line with transaction agreements (Sales and Performance Agreements) in order not to reward inefficient operators whom may have gamed entry into the market at the transaction stage;
- Targeted subsidies to aid in managing impact of high ATC&C losses while holding operators to their loss reduction commitments;
- Timely settlement of MDA Debts.
- Facilitate appropriate financing for crucial loss reduction capex (e.g. WB proposal)

Interventions required to make TEM Effective:

- Cost Reflective Tariff regime preferably implemented with policy support (subsidies);
- Regulatory certainty and consistency in conducting Minor Reviews in a timely manner;
- Proper allocation and prompt resolution of risks relating to Gas and TCN infrastructure;
- Activation of all industry contracts (Vesting, PPAs, TUOS, GSAs, Ancillary Service, Market Participation, Connection Agreements, Performance Agreement).

1. To complete of disbursement of the balance of the Nigerian Electricity Market Stabilization Facility (NEMSF) to the respective Gas suppliers, Generation companies and distribution companies.
2. To implement of N701bn payment assurance program with CBN created for NBET to pay future bills.
3. To pay accrued market shortfall accumulated in the year 2015 – 2016 attributable to the non cost reflective tariff, FX shock and low energy levels.
4. To ensure that distribution companies that perform below the agreed loss levels at the time handover as approved by NERC in 2014, be held accountable for the inefficiency.
5. To ensure board approvals for power sector government agencies are completed to ensure adequate corporate governance.
6. To ensure a transparent and effective regulatory framework.
7. To provide a regulatory environment that is sufficiently flexible to take into account new technological developments and the international trends in the power sector.

1. To develop and implement a cost reflective tariff for the Nigerian Electricity Market.

2. To implement a short – medium term government support that reduces rate shock to consumers, which will improve ATC & C losses.

3. To ensure that distribution companies implement the agreed loss reductions targets as stated in the performance agreements.

4. To recruit a technically competent individual on the board of each of the distribution companies to represent BPE.

5. To ensure that the Nigerian Bulk Electricity Trading is adequately capitalized to meet its obligations as a credit worthy off-taker.

Measures to Recapitalize the DisCos

- The total invested by the Discos to acquire 60% stake was US$1.42 Billion
    - The investors were allowed to borrow up to 70% of this amount to which the Government guaranteed through the Put-Call option in the Performance Agreement and Direct Agreement with lenders
    - Evidence seems to suggest that the Discos are focused on servicing their acquisition loans rather than investing in metering, transformers etc to enhance their operational efficiency and reducing system losses
    - While the acquisition loans are in Dollars, unlike the Gencos that have tariff that are a 100% indexed to US Dollars, the Discos tariff is 100% in Naira, thus the Devaluation of Naira has massively exposed the Disco shareholders balance sheet.
- The CBN can facilitate renegotiation of the shareholder loans outstanding and redenomination of the loans from Dollars to Naira in line with the Discos revenue profile
- Potential dilution of both the FGN and Privately held stakes will help bring some stability to the DisCos balance sheet.

DIMENSIONING OF **ACCUMULATED DEFICIT**

- We assumed the deficit from Nov 1, 2013 to Jan 31st , 2014 was settled in full with NEMSF proceeds (which will be fully disbursed as part of this Program).
- Following TEM, in February 2015 to December 2016, the accumulated deficit in the industry can be attributed to:
  - Sculpting of the retail tariff as provided for under the MYTO 2015 order;
  - Changes in macro-economic variables (i.e. exchange rate depreciation, inflation);
  - Decrease in electricity generated due to gas pipeline vandalism, DisCo operational inefficiencies; and
  - Lack of market discipline by some DisCos (refusal to remit monies owed to the market).
- The accumulated deficit can be dissected into: Tariff Shortfall and Market Shortfall.
  - The Tariff Shortfall is due to changes in macro-economic variables, volumetric shock in energy supplied and the costs of interest on non-financed shortfalls via retail tariff sculpting.
    - This has resulted in a shortfall of **N458 Billion** due to Discos from Customers;
  - The Market Shortfall is due to non-payment of actual MO and NBETs invoices by the DisCos.
    - This has created a shortfall of **N473 Billion** due from DisCos to the market.

Tariff & Market Shortfalls

	Tariff Deficit	Market Shortfall	Disco Excess Responsibility
ABUJA	44,863,980,800	64,102,401,003	(19,238,420,203)
BENIN	53,117,905,427	41,879,416,897	11,238,488,530
EKO	27,395,923,488	24,017,307,731	3,378,615,757
ENUGU	44,160,795,180	56,936,561,525	(12,775,766,345)
IBADAN	58,810,736,003	50,642,075,274	8,168,660,729
IKEJA	37,156,754,007	57,246,818,445	(20,090,064,438)
JOS	36,682,954,768	30,697,763,433	5,985,191,335
KADUNA	47,654,564,826	51,297,518,900	(3,642,954,074)
KANO	39,952,399,439	34,842,039,388	5,110,360,051
PH	47,624,527,132	47,327,268,004	297,259,127
YOLA	20,624,417,296	14,024,911,678	6,599,505,618
TOTAL	**458,044,958,367**	**473,014,082,279**	

DIMENSIONING OF **ACCUMULATED DEFICIT**

2015-2016 Market Shortfalls

DisCos and Service Providers Shortfall

Entity	Type	Amount Owed
SO	Service Provider	9,611,705,769
MO	Service Provider	1,698,316,572
TSP	Service Provider	70,850,515,325
NERC	Regulator	8,739,412,504
NBET	Service Provider	823,337,600
ANCILLARY SERVICES	Service Provider	343271802.4
BENIN	Disco	11,238,488,530
EKO	Disco	3,378,615,757
IBADAN	Disco	8,168,660,729
JOS	Disco	5,985,191,335
KANO	Disco	5,110,360,051
PH	Disco	297,259,127
YOLA	Disco	6,599,505,618
		132,844,640,720

**** The market shortfall is N473 Billion***

GenCos Shortfall

Entity	Type	Amount Owed
AFAM	Genco	25,483,980.23
AFAM VI (SHELL)	Genco	15,223,938,728.69
ALAOJI NIPP	Genco	11,443,953,445.97
ASCO	Genco	(0.00)
CALABAR (ODUKPANI)	Genco	5,560,784,293.38
DELTA	Genco	33,624,579,530.68
EGBIN	Genco	55,608,085,694.17
GBARAIN NIPP	Genco	1,939,157,854.06
GEREGU	Genco	10,058,931,839.14
GEREGU NIPP	Genco	10,466,104,441.15
IBOM POWER	Genco	5,674,175,656.79
IHOVBOR NIPP	Genco	10,460,206,651.29
JEBBA	Genco	21,339,888,622.65
KAINJI	Genco	15,850,484,578.16
OKPAI	Genco	47,656,142,355.13
OLORUNSOGO 1	Genco	19,172,295,927.45
OLORUNSOGO 2 (NIPP)	Genco	5,558,092,998.28
OMOKU	Genco	1,001,681,597.10
OMOTOSHO 1	Genco	18,857,639,621.57
OMOTOSHO 2	Genco	13,097,650,211.48
RIVERS IPP	Genco	1,227,807,811.15
SAPELE	Genco	5,485,827,232.96
SAPELE 2 (NIPP)	Genco	11,008,023,165.76
SHIRORO	Genco	19,826,494,178.98
TRANS AMADI	Genco	2,011,142.58
		340,169,441,558.79

IDENTIFY FUNDING SOURCES

The analysis has shown that the power sector will require funding of approximately **$7.6 Billion** over five years, going forward, the table below shows possible funding sources

Source	Funding ($ billion)
Budget Allocations	3.50
NIPP Sales	2.10
World Bank	1.00
AfDB	1.00
Total	**7.60**

A) The World Bank

The World Bank has proposed $2.5bn support to Nigeria's power sector given the critical importance of the sector to economic recovery . At least $1.0bn of this will go towards a performance based loan to enable NBET to pay 100% of its wholesale invoices in full and on time.

B) The AfDB

The AfDB has proposed $3 to $4bn of support to Nigeria (albeit their likely intention is to spread this across a number of sectors). FGN will push for at least $1bn of this to go into supporting the NBET/MO funding shortfall.

C) NIPP Sales

There are at least three NIPP GenCos that could be sold for their bid prices (Geregu, Calabar, Omothosho and Ihovbor) provided the FGN put in place the requisite payment guarantees (i.e. similar to those offered to the new entrant IPPs). The sale of these assets would probably take at least a year to complete but could raise a further $2.1bn.

COMMUNICATIONS

Determine PSRIP Messaging for Specific Stakeholders

Core Messaging

- Restore power sector stability
- Restore sector sustainability unto a path for sector growth

Conduct Sector Stakeholder Engagements

- Engagements will include briefings, presentations, workshops, roundtables and dissemination of communications deliverables
- Stakeholders are Executives, Sector MDAs, NASS, Private Operators, Investors, CBN, Judiciary, Ministry of Finance, etc.

Implement Strategic Communication Plan with Non-Sector Stakeholders

- Hold awareness and advocacy initiatives with the media, banks, CSOs, MAN, consumers, etc.
- Conduct public sensitization on the PSRIP and sector activities with town halls, television, newspaper, social media and radio campaigns.

Increase Access to Information and Transparency

- Launch Power Sector Website as a key channel for information/data access on the PSRIP and power sector activities which include sector achievements, milestones, etc.)
- Dissemination of infographics, video and awareness tools through multiple channels.

Measure, evaluate, and assess communications impact

- Conduct daily media monitoring.
- Establish channels to attain stakeholder feedback to identify communications gaps.
- Conduct public consultations, surveys and polls to determine stakeholder perception.
- Revise messaging/communications activities based on findings.

WORLD BANK GROUP

WORLD BANK GROUP

The World Bank Group has expressed its willingness to assist the Federal Government of Nigeria (FGN) in preparing and supporting a credible power sector recovery implementation program. The World Bank Group has indicated potential support for the plan totalling up to US$2.5 bn with an additional US$2.7 bn (IFC investment and MIGA support) for private investment (*Breakdown shown in table below).*

S/N	Item	Description	WBG potential funding (US$'mn)
1	Performance based loan for financial support to eliminate cash flow deficits	Performance based loan for financial support t NBET to ensure GENCOs and Gas suppliers are paid 100% notwithstanding any shortfalls from DISCOs.	1,000
2	Loss Reduction in Distribution including Metering	Initial deployment should be focused on maximum demand customers. The metering scheme will be tied to clearly defined performance targets for the DISCOs supported by data and information received during an audit exercise.	500
3	Support to TCN	Financing program for TCN priority projects.	364
4	Rural electrification initiatives	Solar mini grid projects, Social solar electrification projects – schools, hospitals, and Rural electrification fund	350
5	Guarantees	IPP guarantees – IBRD	305
	Total		**2,519**
6	IFC	Direct investment and mobilisation for power sector for additional 3.5GW of power generation as well as investments in distribution companies	1,300
7	MIGA	Guarantees for both gas and solar IPPs (debt and equity)	1,400

CONDITIONS – The list below highlights the TASKS FGN has to fulfil in order to qualify for the $2.5billion shown on the pervious slide.

1. **FEC approval of the Power Sector Recovery Implementation Program (PSRIP)**
2. Sources of funding identified for the PSRP
3. Appointment of Boards (NBET, TCN, NELMCO, NDPHC, REA, BPE)
4. Appoint BPE professional Directors on DISCO Boards
5. Policy statement issued by FMoPWH on cost-reflective tariff / subsidy path endorsed by FMoF
6. Update MYTO methodology consistent with policy
7. Carry out tariff review (per MYTO review schedule)
8. Budget containing provision for MDA debt approved
9. Announce the operational mechanism for subsidy
10. Institutional arrangements in place for oversight, implementation and monitoring of the PSRIP
11. Issue the gas pipeline vandalism prevention strategy
12. Implement [approved actions] to reduce gas pipeline vandalism
13. Review and confirmation of gas and transmission infrastructure investment required for PSRIP
14. Conduct legal review of sector contracts including Performance Agreements, Vesting Contracts and PPAs to facilitate hitch-free contract activation
15. Review by BPE/NERC of Disco investment/performance improvement plans
16. Market Operator submits generation adequacy report to NERC
17. Review of timing of projects in preparation and issue policy for competitive procurement
18. Issue communications strategy for PSRIP and begin implementation

ONGOING **ACTIVITES**

1. Financial analysis of DisCos and GenCos
2. DisCo Recapitalization plan
3. Quantifying potential private sector investment
4. Developing and implementing measures to enforce market discipline
5. Infrastructure Gap Analysis (gas, generation, transmission & distribution)
6. Legal review of market contracts & privatisation agreements
7. Developing standard template for reporting and monitoring MDA PSRIP tasks.
8. Communications Strategy
9. MDA debts verification exercise

ACTION PLAN

ACTION PLAN

ROLES & RESPONSIBILITIES

MDA	Action Item	Target Date
1. Federal Government of Nigeria	1. FEC approval of the Power Sector Recovery Program	22th March 17
	2. Policy statement to support the power sector with **7.5 billon** over 5 years, for market viability	29th March 17
	3. Policy statement that tariff must be cost reflective over the next 5 years	29th March 17
	4. Established boards for BPE, NBET, NDPHC, TCN, REA, NAPTIN, NEMSA and NELMCO and Chairman NERC	1st June 17
	5. Designate Professional Directors in representation of BPE on DISCO boards	1st June 17
	6. Payment of MDA past debt settlement	30th June 17
	7. Commence Payment of MDA future electricity bills	30th Sep 17
2. Office of the Vice-President	8. Establish transparent and comprehensive sector website	31st May 17
	9. Oversee and monitor the implementation of PSRP	On-going
	10. Coordinate FGN/WB Working Group	On-going
	11. Project manage FGN deliverables for World Bank Group CPs	On-going
	12. Conduct desktop verification process for MDA debts	28th April 17
	13. Conduct physical verification exercise for MDA debts	29th Sept. 17

MDA	Action Item	Target Date
3. Federal Ministry of Power, Works and Housing	14. Coordinate FGN communication strategy preparation and roll-out	31st May 17
	15. Ensure all NEMSF requirements satisfied by NESI	15th April 17
	16. Take ownership of PSRIP	On-going
	17. Establish communications strategy for PSRP	14th April 17
	18. Issue clear policy on actions (i.e tariff, proposed funding to cover shortfall)	17th May 17
	19. Ensure all requirements for NEMSF are met to allow completion of full disbursement. Including agreements with NESI participants for LC loan for Abuja and Kaduna Discos	19th April 17
	20. Commencement of full commercial operation of the electricity market	29th Dec 17
4. Nigerian Bulk Electricity Trading Company (NBET)	21. Finalize and make effective vesting contracts with Discos (Abuja, Kaduna, Benin, Yola)	29th Sep. 17
	22. Make Power Purchase Agreement (PPAs) effective	29th Sep. 17
	23. Pause on new generation (unsolicited). Develop competitive procurement plan.	29th Sep. 17
	24. PCOA Issues - NBET should develop bankable PCOAs	24th March 17

MDA	Action Item	Target Date
5. Bureau of Public Enterprise (BPE)	26. BPE to engage with NERC on DISCO revised business plans to be negotiated, finalized and effected.	31st March 17
	27. Legal review of Performance Agreements	31st March 17
	28. Make performance agreements effective	31st May 17
	29. Obtain all management accounts from each DISCO on a monthly basis	On-going
	30. Obtain all audited accounts yearly	On-going
	31. Conduct legal review of contracts and direct/bank agreements with the consequences of all types of terminations	31st May 17
	32. After agreements are effective, monitor that all LCs should be available within 3 months	31st Aug 17
	33. Comment on NERC Business Continuity Regulation	4th April 17
	34. Develop process of management contractor in the event Disco failure	21st April 17
	35. Present proposal on way forward for TCN	21st April 17
	36. Conduct assessment of losses	31st Aug. 17
	37. Require Discos to identify all customers and commence metering program	29th Sep. 17
	38. Report on Adequacy of Discos technical partners	19th May 17

MDA	Action Item	Target Date
6. Nigeria Electricity Regulatory Commission (NERC)	39. Update MYTO methodology to include quarterly regulatory tariff reviews to reduce time lag in reflecting PPAs (which adjust monthly)	19th June 17
	40. Update the retail tariff design	18th May 17
	41. Publish in website 2016 December tariff review	3rd April 17
	42. Conduct tariff reviews with sculpting and non-sculpting scenarios	28th April 17
	43. Project cost reflective tariff over the next 5 years	28th April 17
	44. Build capacity of NASS, Judiciary, etc. on sector activities and publicize	31st May 17
	45. Conduct assessment of number of customers	28th Sep 17
	46. Establish enforcement strategy for sector participants and publicize	7th April 17
	47. Finalize business continuity regulation after completing consultation	22nd May 17
	48. NERC reviews approach for transmission MYTO towards a revenue cap performance based rate setting (PBR) (with caps to penalties)	31st July 17
	49. NERC enhances website (communication) and includes performance evaluation of Discos and TCN	25th April 17
	25. Conduct forensic audit of all DISCOs by reputable accounting firms	27th May 17

MDA	Action Item	Target Date
7. Transmission Company of Nigeria (TCN)	50. Execute Power Transmission Agreements	26th May 17
	51. MO to execute market participation agreements and LCs effective	30th June 17
	52. Submit details of foreign currency loans to NERC to ensure tariff accommodates debt service obligations	31st March 17
	53. Establish ancillary services agreements	29th June 17
	54. SO Submit demand projection report for 5 years to NERC for approval and SO publishes Report in website	30th May 17
	55. MO Submit generation adequacy report to NERC for approval and publishes in MO website	30th May 17
	Prepare strategy on legacy assets and liability	28th April 17
	56. Submission of least cost generation and transmission expansion plan for NERC approval and TCN adoption of transmission expansion plan	29th Sep. 17
	57. Update Grid Code as needed to ensure feasibility and management of shortages, including demand forecast bottom up approach and open access provisions	31st May 17
	58. Regularly submit to NERC performance data and planned transmission investment plus progress (Monthly)	On-going
	59. SO Regular publication on website: operational plans, actual results of operation and explanation of differences (Monthly)	On-going
	60. Regularly publish in TCN website: updated transmission expansion plan, standard connection and use of system agreement, and procedures for new connections	On-going

MDA	Action Item	Target Date
8. Nigerian Electricity Liability Management Company (NELMCO)	61. Prepare strategy on liability settlement	31st May 17
9. Ministry of Finance	62. Payment mechanism for MDA debt payment	28th April 17
	63. Advise on possible funding options for PSRIP and operational mechanism	28th April 17
	64. Implement mechanism for regular future payment of MDA electricity bills	30th June 17
10. Central Bank of Nigeria	65. Accelerate LC resolution for Abuja and Kaduna	25th April 17
	66. Complete NEMSF disbursement	1st May 17
	67. Conclude upstream payment assurance plan	31st May 17
	68. Establish MDA debt disbursement payment system based on FMoF payment mechanism for MDA debts	28th June 17
	69. Establish clear forex policy for power sector	28th April 17

MDA	Action Item	Target Date
11. Niger Delta Power Holding Company (NDPHC)	70. Complete all projects to evacuation stage for all 10 power plants	20th March 18
	71. Complete all transmission projects	20th March 18
	72. Privatize Calabar, Geregu 2, Ihovhor and Omotosho power plants in conjunction with BPE (proceeds to go to PSRIP)	20th March 18
	73. Finalize all commercial agreements	20th March 18
12. Ministry of Petroleum Resources/ NNPC/NGC	74. Develop clear plan on completion of gas-to-power projects	31st April 17
	75. Develop clear plan on gas vandalism prevention strategy	31st April17
	76. Activate gas supply agreements and contracts	31st July 17

ACTION PLAN

ROLES & RESPONSIBILITIES

DISCOS	Action Item	Target Date
DISCOS		

ACTION PLAN

ROLES & RESPONSIBILITIES

GENCOS	Action Item	Target Date
GENCOS		

APPENDIX

Working Group Coordination

The FGN-WBG Working Group will be coordinated by the **Damilola Ogunbiyi**, Senior Special Assistant to the President on Power, Office of the Vice President and **Kyran O'Sullivan**, Lead Energy Specialist, World Bank.

FGN TEAM consists of representatives from the following organizations -

1. Office of the Vice President
2. Ministry of Power, Works and Housing
3. Ministry of Finance
4. Ministry of Petroleum Resources
5. Central Bank of Nigeria
6. Nigerian Electricity Regulatory Commission
7. Bureau of Public Enterprises
8. Nigerian National Petroleum Corporation
9. Niger Delta Power Holding Company
10. Nigerian Bulk Electricity Trading Company
11. Transmission Company of Nigeria

World Bank TEAM

1. **Junhui Wu.** Overall direction.
2. **Beatriz Arizu.** Regulatory& Institutional
3. **Muhammad Wakil.** Tariff analysis
4. **Kate Baragona**. Financial solutions
5. **Richard Games**. Financing options
6. **Gulum Dhalla**. Company financial analysis
7. **Olayinka Babalola**. Fiscal space analysis
8. **Dhruva Sahai.** Financial Analysis

A number of analytical tasks have been commissioned (e.g. on priority gas supply, generation & transmission infrastructure) as inputs to the plan.