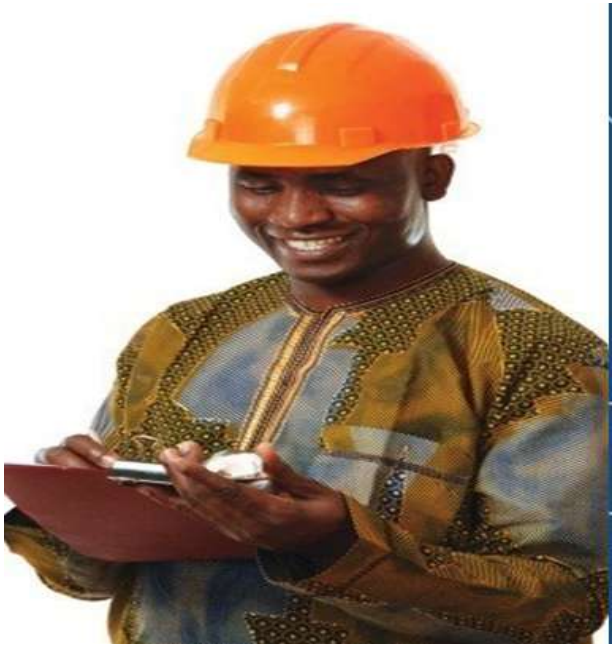

Turning the National Integrated Infrastructure Master Plan into Reality: Opportunities for Inclusive Growth

By

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Objectives of the Presentation

- Discuss the key features of the NIIMP
- Highlight strategies for actualizing the NIIMP
- Present opportunities embedded in the NIIMP for inclusive growth

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Outline

- Background
- NIIMP: Project Development Process
- Current State of Nigeria's Infrastructure
- Highlights of the NIIMP Document
- Highlights of 5-years Operational Plan
- NIIMP Implementation Strategies
- What is Inclusive Growth?
- NIIMP: Opportunities for Inclusive Growth
- Conclusion

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Background

- Infrastructure generally (power, transport, water, ICT, etc) is a key enabler to economic growth and development
- Nigeria's weak infrastructure base constraints socio-economic development
- The objective of the NIIMP is to address the deficiency in infrastructure stock
- FEC on November 21, 2012approved Framework for the crafting of the NIIMP (2014-2043)

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NIIMP: Project Development Process

- National Planning Commission was assigned the responsibility of coordinating the development of the NIIMP
- Draft NIIMP document evolved through a highly participatory process
- Over 1500 experts participated in:
  - National Steering Committee (NSC)
  - National Technical Working Group (NTWG)
  - Business Support Group (BSG)
  - 11 Technical Working Groups (TWG)

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NIIMP: Project Development Process

Project Development Structure

- **11 TWGs**
  - **Energy** **--Transport**
  - **ICT** **--Water, Agric & Mining**
  - **Housing & Reg. Dev.** **--Soc. Infrastructure**
  - **States' Infrastructure** **-- Vital Registration & Security**
  - **Financing** **--Legal and Regulatory**
  - **Plan Delivery and M&E**
- **Each TWG had 30-40 members**
- **6 regular meetings of 11 TWGs**
- **5 regular meetings of the BSG**
- **1 meeting of the NTWG**
- **2 meetings of the NSC**
- **The process took over 9 months to complete**

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NIIMP: Project Development Process

- A global consulting firm, McKinsey & Co, provided the technical support
- Draft NIIMP blueprint was validated in all the 6 geo-political zones for additional inputs
- This shows the extensiveness of the work process in the development of the NIIMP Document
- Draft NIIMP document is awaiting consideration and inputs of NEC, and approval of FEC

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NIIMP: Project Development Process

- States Participation Process
  - At all levels of NIIMP development process States were involved through zonal representatives
  - Equally also, a TWG (States' Infrastructure TWG) was dedicated primarily to address sub-national infrastructure needs
  - Each zonal representative was expected to coordinate the inputs of the States in the zone
  - 3 States (Edo, Nasarawa and Enugu States) made submissions to this TWG
  - Zonal validation workshops were also held in 6 geopolitical zones (Benue, Cross-River, Enugu, Gombe, Kano and Oyo States) for additional inputs into the draft NIIMP document

Current Situation of Nigeria's Infrastructure

- The assessment of Nigeria's infrastructure frame before the development of the NIIMP in January 2013 confirms the following key attributes:
  - Core infrastructure stock was estimated at 35-40% of the GDP (1990 base year)
  - Infrastructure stock was inadequate for desired growth and socio-economic development
  - Infrastructure development was incoherent, inconsistent, lacks continuity and coordination

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Nigeria's Current Stock of Transport Infrastructure


- 90% of all freight and passenger moved by roads
- National road network of about 200,000km
  - Federal: 35,000km (18%)
  - States: 17,000km (15%)
  - Local Government roads 150,000km (57%)
- 32% of federal roads in good condition
- 22% states roads in good condition

Road


- 93 general cargo berths
- 5 RORO berths
- 7 bulk solid cargo berths
- 11 bulk liquid cargo and 63 buoy berths
- 650 different pieces of cargo handling equipment
- About 3,00km of 10,000 km inland waterways navigable

Ports


- 3,505 km narrow gauge rail line
- 827 km narrow gauge sidings and loops
- 255 km standard gauge (ongoing)
- 715 km of branch lines
- 280 stations
- 267 outstations
- 353 bridges

Rails


- 4 international airports,
- 18 domestic airports

Air

Nigeria's Current Stock of Energy Infrastructure


- 36.6 billion barrels
- 182.8 trillion cubic feet gas
- 445,000 bpd installed refining capacity
- 5,120 km NNPC pipeline network
- 258 tanks in 22 depots with a combined holding capacity of 2.6 billion litres

Oil & Gas


- Installed generation capacity of ~7,000 MW
  - 70% gas-fired
  - 30% hydro
- 3,500- 4,500 MW capacity utilization currently
- 20 small private generation plants
- 9 private plants under construction

Power (Generation)

•5,524 km of 330 kV transmission lines
•6,802 km of 132 kV lines.
•32 330/132 kV substations
•96% of installed capacity of the 330/132 kV transmission network

- 37,173km of 33 kV
- 29,055km of 11 kV
- 70,799km of 0.416 kV
- 102 Nos 132/33/11 kV substations
- Combined installed transformation capacity of 9,130 MVA
- 94.1% of installed transmission capacity

Power (Trans. & Dist.)

Nigeria's Current Stock of ICT, Water & Agric Infrastructure

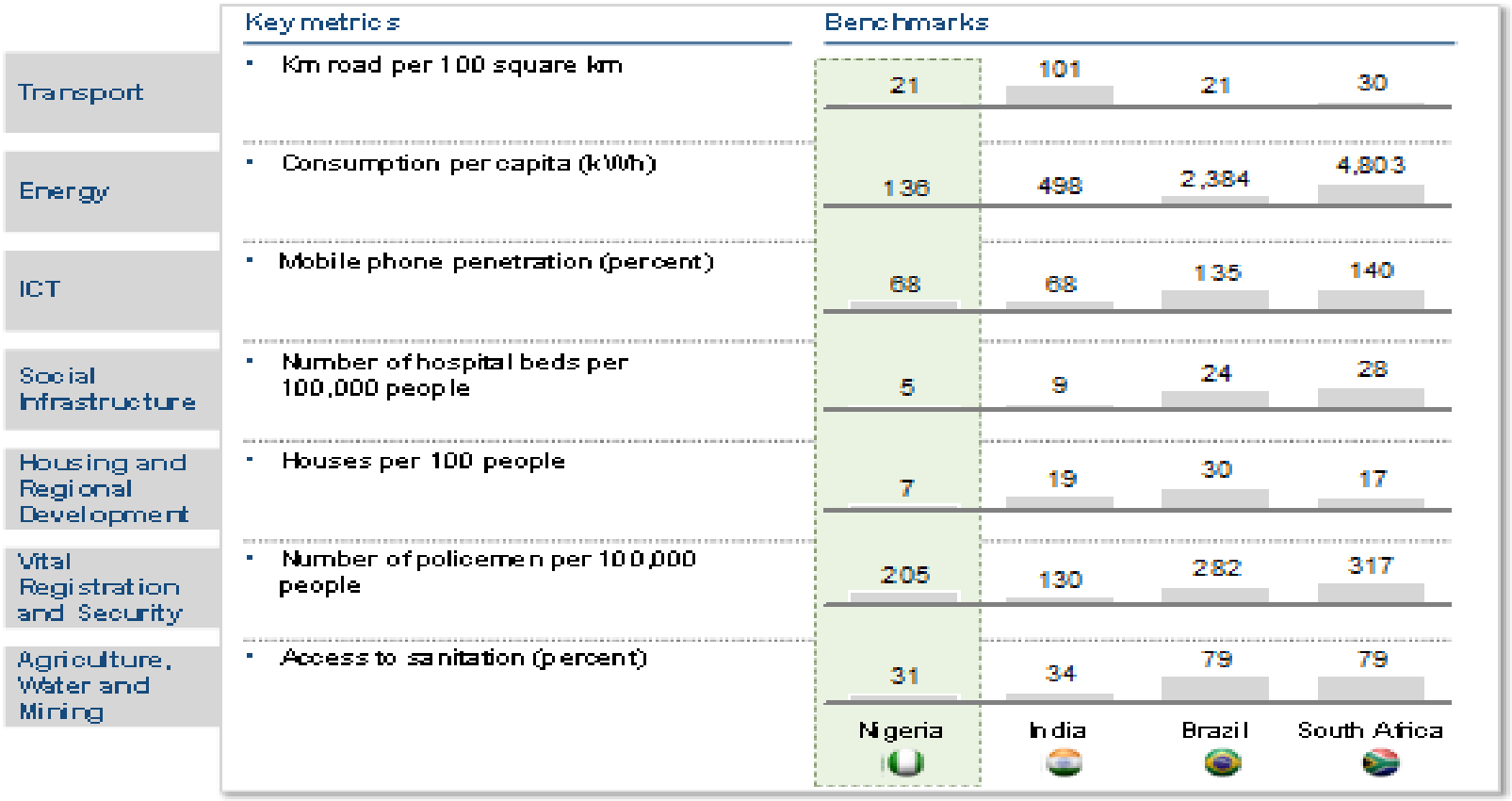
- 9.8 Tbps of broadband connectivity
- 25,000 base stations microwave radios
- 169,000 km, and 35,000 km of fibre-optic cables
- Over 100 million GSM lines
- 63% mobile penetration
- 75% of all internet access is served by mobile broadband

ICT

- 14 Staple Crop Processing Centres
- 80 agro input centres
- 8 agro-processing centres
- 18 agro-industrial estates
- 6 export crop handling, preservation and conditioning centres
- More than 200 dams
- Dams combined storage capacity of 34 bm^3
- Dams irrigation capability of 500,000 ha of land
- Only 300,000 ha of 3.1 million ha of irrigable land)

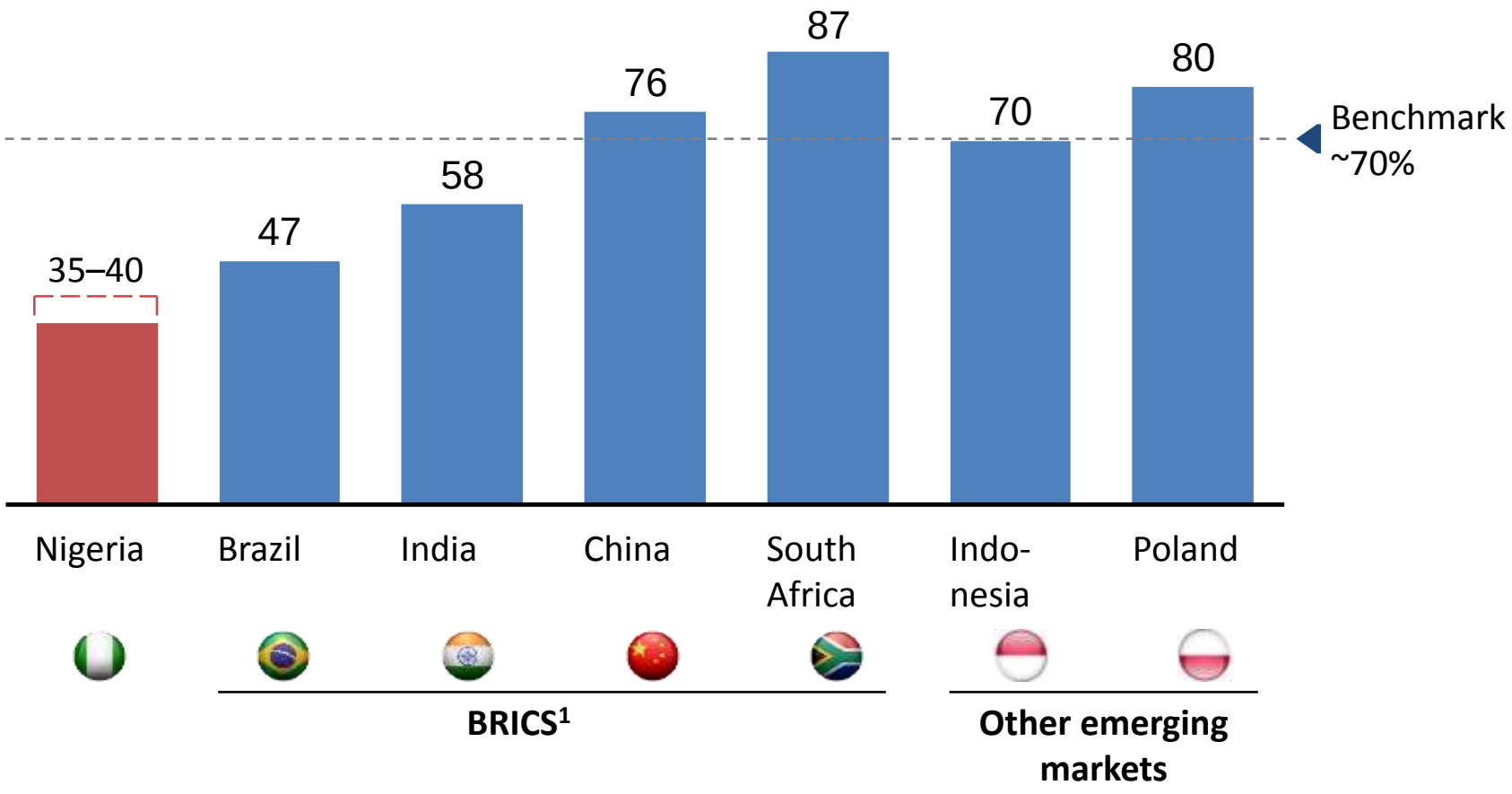
Water & Agric

Current Stock of Infrastructure: Nigeria and Comparator Countries



SOURCE: World Bank

Fig 1: Core infrastructure stock as % of GDP: Nigeria and Comparator Countries



1 Excludes Russia

SOURCE: ITF; GWI; IHS Global Insight; McKinsey Global Institute analysis

Highlights of NIIMP Document

- A capital allocation framework for 30 years (2014-2043)
- Infrastructure investment spreads across all the 6 geopolitical zones in the Federation
- Intends to increase Nigeria's core infrastructure stock as % of GDP from 35-40 to 70 by the year 2043
- Identifies investment required to bridge the existing infrastructure gap
- Infrastructure spending to increase reasonably
  - From the current 3-5% of GDP to an average of 9% over the 30 year period
  - About 2% of the GDP to be spent on maintenance of infrastructure

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Highlights of NIIMP Document (cont.)

- Coverage/scope
  - Core (energy, transport, ICT and water)
  - Non-core (housing, agriculture, mining, social, vital registration and security)
- Investment of over USD2.9 trillion required (Fig 2)
- Allocation by asset class, prioritizes energy and transport (Table 1)

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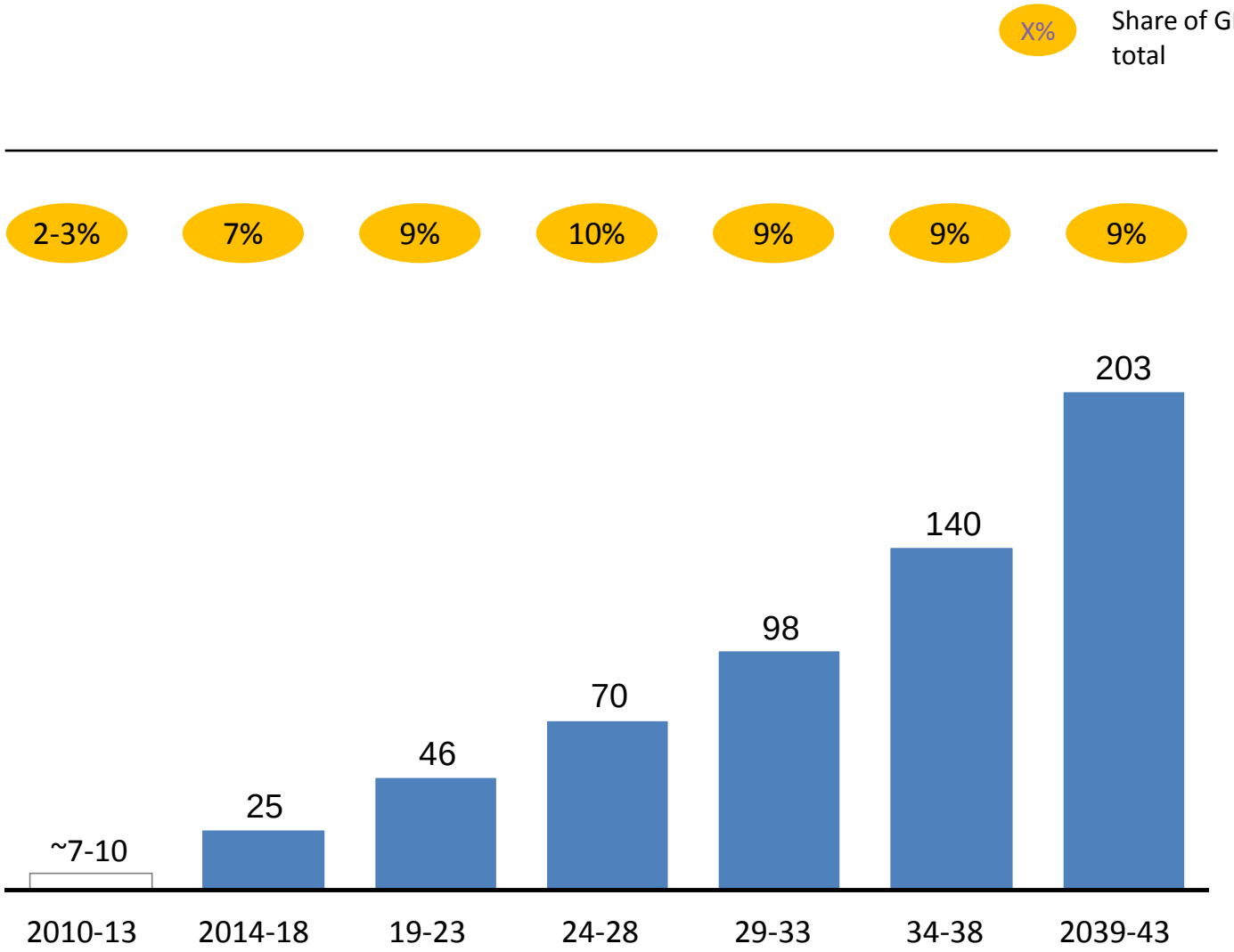
Table 1: Allocation by Asset Class

Sector	Allocation (USD)	% of Total	Priorities
Energy	900 billion	31%	•Continued growth of generation capacity •Growth in transmission infrastructure •Construction of supporting gas infrastructure •Increased refining capacity.
Transport	850 billion	29%	•Refurbish cross-national highways •Expand regional road network and linkages to other modes of transportation •Construction and rehabilitation of major rail links •Renovation and upgrading of main airports •Inland waterways •Urban transportation in major cities
Agric, Water & Mining	350 billion	12%	•Water supply and irrigation •Development of staple crop processing zones, agro-industrial parks, as well as agricultural processing facilities, •Reviving the basic mining infrastructure.
ICT	300 billion	10.5%	•Expansion of mobile network capacity •Expansion of broadband fiber optic network
Housing & Regional Development	300 billion	10.5%	•Increasing the number of housing units to close the current and projected housing deficit
Social Infrastructure	150 billion	5%	•Construction of facilities for education, hospitals, women and youth development and sports
Vital Registration & Security	50 billion	2%	•Establish a national vital registration system •Construct ion and rehabilitation of facilities for all security institutions
	2,900	**100%**	

Fig 2: Annual Investment Required in USD billions



Required investments to close infrastructure gap

SOURCE: NIIMP development team

NIIMP's 5-years Operational Plan (2014-2018)

- Contains FG priority projects for the first five years
- Total investment: USD 127.5 billion
- Investment priorities in Energy, Transport, Social Infrastructure, and Housing & Regional Development are top priorities (Fig 3)

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NIIMP's 5-years Operational Plan (2014-2018)

- Public sector (FG and sub-national governments) investment of USD 67 billion accounts for 52% of total investment
- Potential Sources
  - USD 36 billion = Public current account
  - USD 29 billion = Public debt
  - USD 13 billion = Other sources (SWF, Pension Fund)
  - USD 10-20 bn = PPPs
- Private sector to account for the remaining 48%
- States are expected to emulate FG to formulate 5-year Operational Plan for the State Integrated Infrastructure Master Plan (SIIMP)

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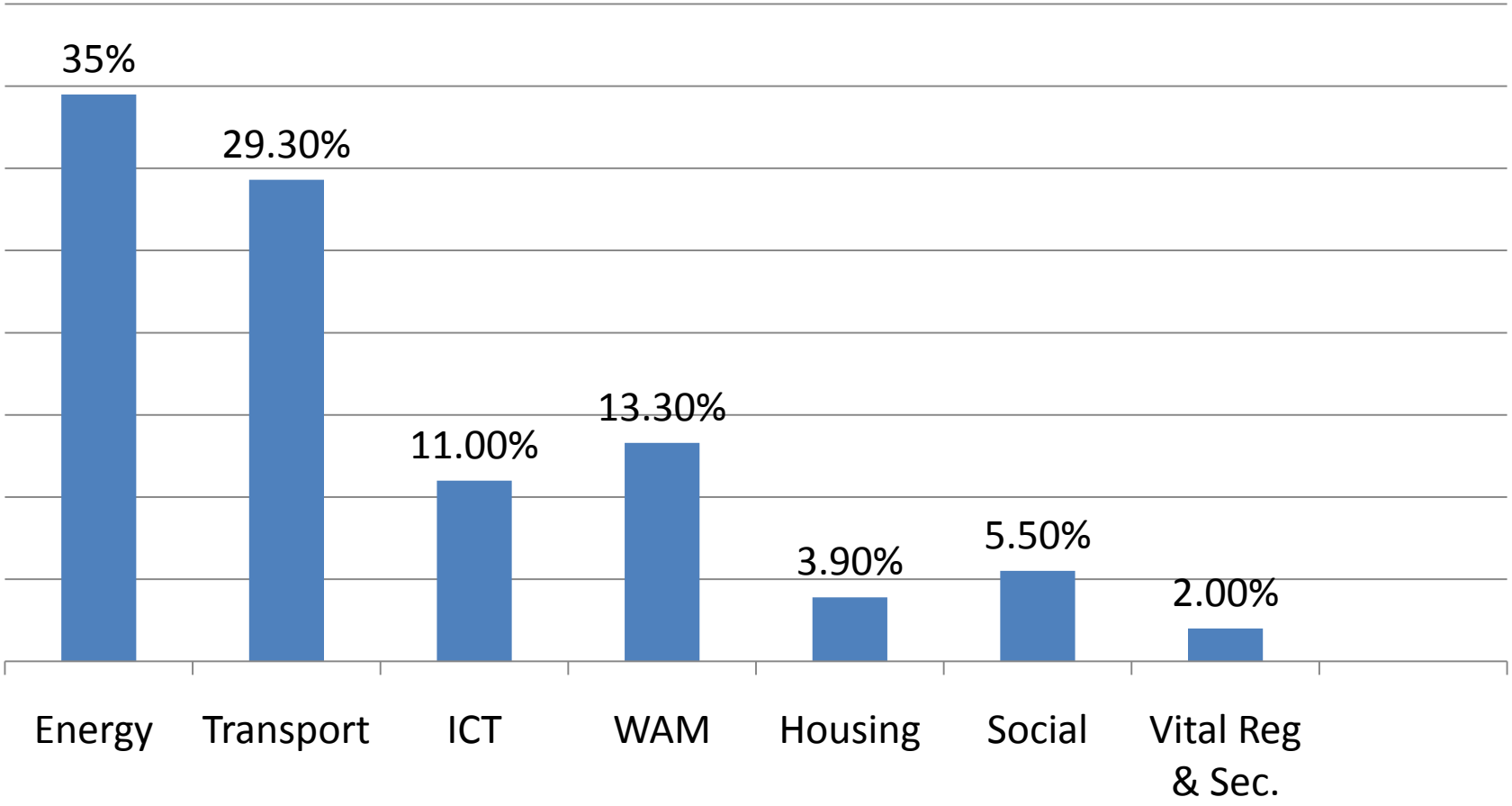
Fig 3: Allocation by Sector as % Total Investment (2014-2018)



NIIMP Implementation Strategies

- Improving investment environment to encourage private sector participation (monetary, fiscal, etc)
- Optimizing infrastructure governance structure (Infrastructure Delivery Unit, etc)
- Evolving appropriate financing policies (CBN infrastructure financing policy, SEC initiative on securitization infrastructure financing, special intervention funds, Pension and Sovereign, etc)
- Encouraging States' collaboration
- Initiating capability building programme

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NIIMP Implementation Strategies (cont.)

- Strengthening engineering infrastructure (equipment, machines, technology)
- Enforcing standards
- Strengthening regulatory framework for PPP
- Evolving legal framework (NIIMP Act)
- Creating robust communication strategy
- Indentifying Quick Win projects identified for inclusion in 2014 FGN budget (e.g. construction of 28 new dams, 12 irrigation facilities, feasibility coal-fired power plant, dualization of Shagamu-Ore-Benin)

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What is Inclusive Growth?

- Economic growth is quantitative increase in national production of goods and services over a period
- Inclusive economic growth ensures equitable access to opportunities among social classes, regions and sectors
- Provision of infrastructure is a strategy for inclusive growth

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NIIMP: Opportunities for Inclusive Growth

- Medium to long term, well planned infrastructure investment spurs growth and improves competitiveness (WEF, 2012)
- Infrastructure development promotes economic growth, equity and poverty reduction (UN-Habitat, 2011)
- Effects of infrastructure development on inclusive growth include:
  - Creating jobs
  - Reducing production and transaction costs
  - Increasing access to factors of production and market to reduce bottlenecks in the economic and poverty incidence (OECD: 2006; ADB: 2012)

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NIIMP: Opportunities for Inclusive Growth (cont.)

- Raising Nigeria's infrastructure endowment to Africa's middle-income countries (such as South Africa) could
  - boost annual per capita growth by around 4 percentage points
  - improving Nigeria's power infrastructure will contribute up to 2 percentage points to per capita growth (World Bank 2011)

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NIIMP: Opportunities for Inclusive Growth (cont.)

- NIIMP offers the following opportunities for inclusive growth
  - Facilitate diversification of economy and generation of opportunities for improved income for millions of Nigerians
  - Accelerate growth of sectors with high poverty reduction impact (agriculture, mining, water, social)
  - Address spatial disparities (poverty rate, literacy, unemployment, health indices, etc) through the regional allocation framework

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NIIMP: Opportunities for Inclusive Growth (cont.)

– Improve quality of life

- Access to primary healthcare to increase from 33% in 2013 to 61% in 2043
- Hospital beds per 100,000 people to increase from 53 in 2013 to 450 in 2043
- 100% access to electricity by 2043
- 100% coverage of water supply and sanitation access by 2043
- Over 30 million housing units to be provided by 2043

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NIIMP: Opportunities for Inclusive Growth (cont.)

Create Jobs

- 600,000 additional construction workers for maintenance and expansion of infrastructure in next 5 years
- Additional 8 million people required in next 5 years to operate expanding infrastructure
- 20 million additional jobs in agriculture are envisaged over the next 30 years
- Over 5 million people to be employed with improved mining infrastructure
- Provide reliable supply of infrastructural services to boost self-employment opportunities

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Conclusion

- This presentation has highlighted the features of the NIIMP and its implementation strategies
- Development and implementation of the NIIMP will facilitate opportunities for inclusive growth
- States are required to evolve SIIMPs to align with the NIIMP

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Thanks for your attention!!!