

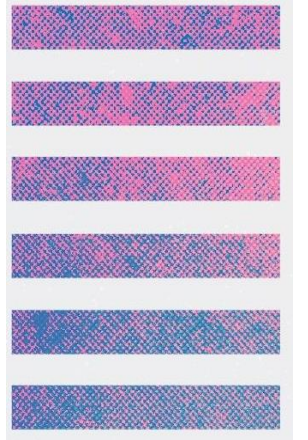


ADDRESSING NIGERIA'S INFRASTRUCTURE DEFICIT THROUGH SUSTAINABLE FINANCE

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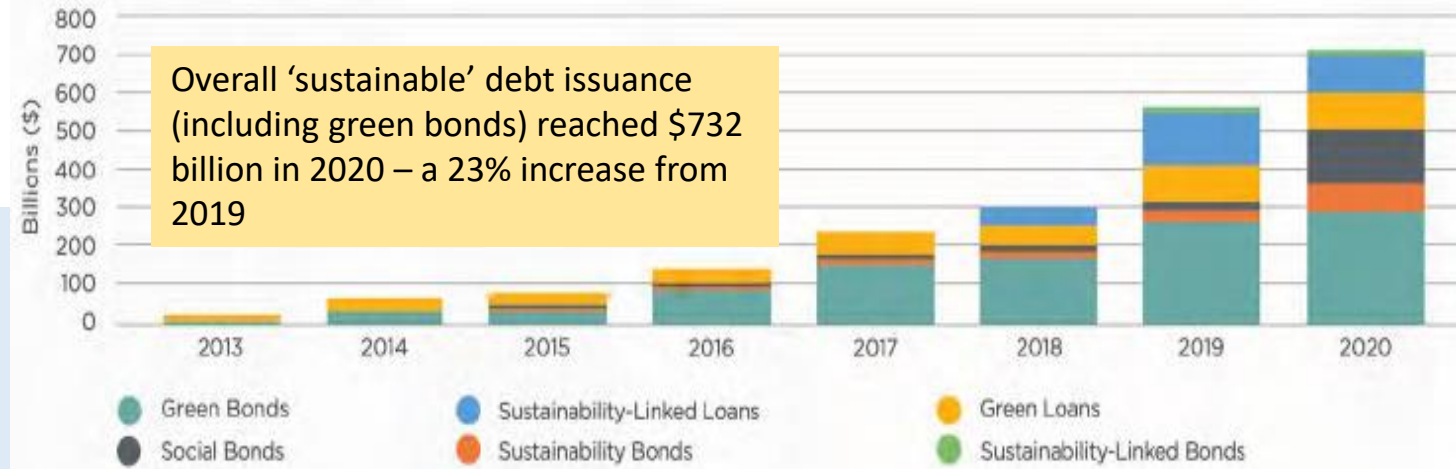
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- ❖ Nigeria's Infrastructure Deficit
- ❖ Selected Cases of Sustainable Financing of Infrastructure
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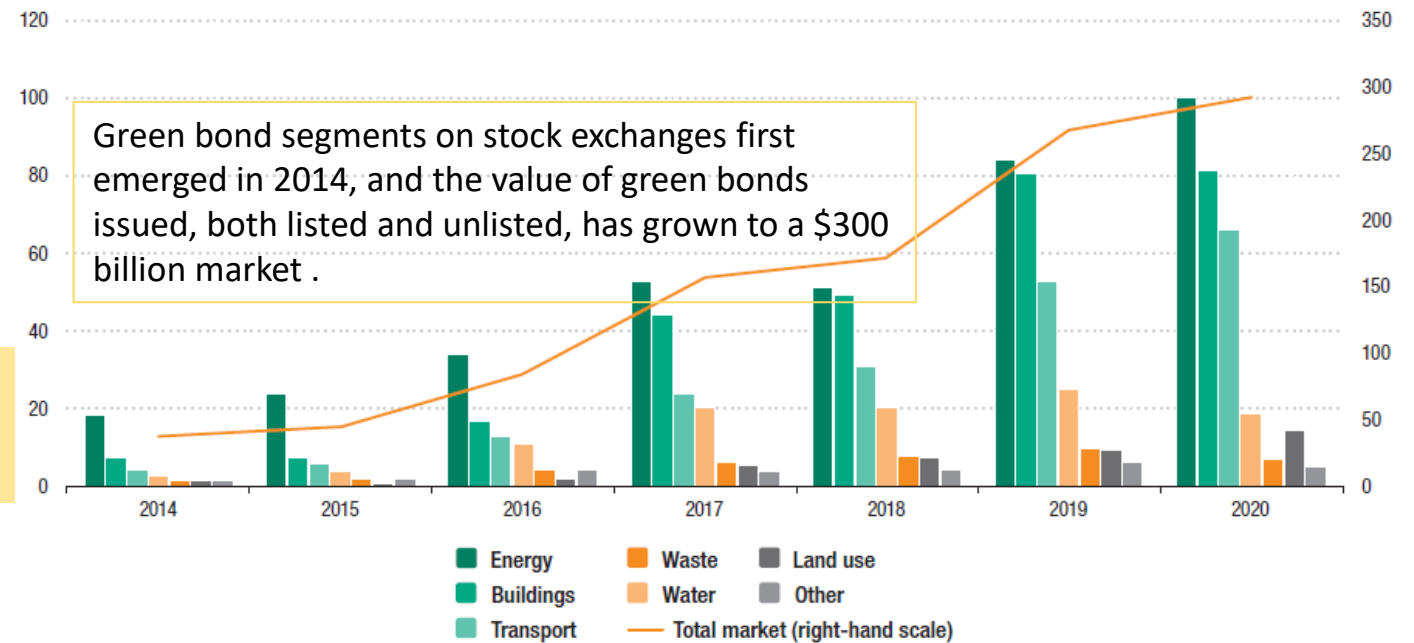
Sustainable Finance

- The process of taking environmental, social and governance (ESG) considerations into account when making investment decisions in the financial sector
- leading to more long-term investments in sustainable economic activities and projects.

The proceeds are primarily used in 3 sectors: energy, buildings and transport



Sustainable Debt Issuance (Source: Sustainalytics-2021)



Green bond market size and industries financed (\$'bn) – UNCTAD and Climate Bonds Initiative

Nigeria has robust framework for sustainable finance

- Codes of Corporate Governance
 - SEC Code (2011) has Part D addressing sustainability issues between companies and stakeholders.
 - Also Part E of the National Code of Corporate Governance (2018) by the Financial Reporting Council
- SEC Rules on Green Bonds (2018)
 - Defined as any type of debt instrument, the proceeds of which would be exclusively applied to finance or refinance in part or in full new and/or existing projects that have positive environmental impact
- SEC Rule on Social Bond
- The Nigerian Sustainable Finance Principles (NSFP)
 - By FSRCC to stimulate a resilient, competitive and sustainable financial services sector with ESG considerations
- NSE Sustainability Disclosure Guidelines (2019)
 - Listed companies expected to integrate sustainability principles into their activities and report progress to their stakeholders

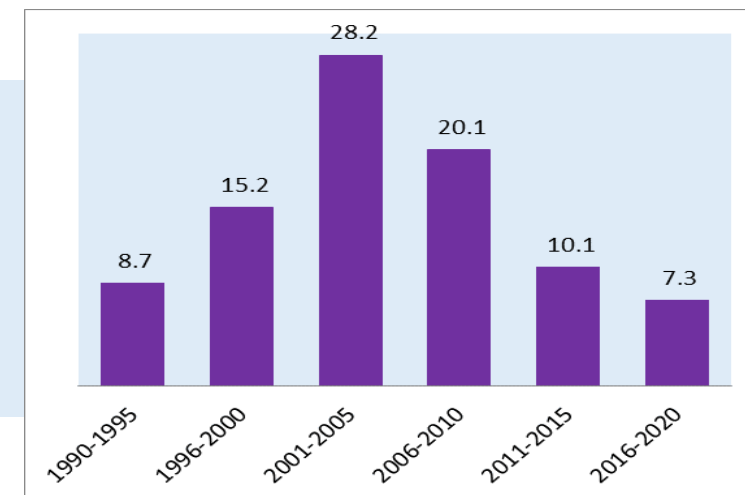
But Nigeria is yet to realise its potential in leveraging sustainable finance

Issuer	Auction Date	Amount (N'b)	Purpose
Federal Government of Nigeria	18-Dec-17	10.69	This is to finance projects in 2017 Budget for afforestation, renewable energy and provision of clean energy to support education
NSP-SPV Powercorp Ltd	27-Feb-19	8.50	To re-finance existing green assets and projects, listed in the Pricing Supplement. (Shiroro Solar Power Project)
Access Bank	18-Mar-19	15.00	To finance/re-finance identified eligible green assets and projects, (Water-flood defense, Solar-generation facilities, agriculture)
Federal Government of Nigeria	10-Jun-19	15.00	Green projects as identified by the Inter-Ministerial Committee on Climate Change and approved in 2018 Appropriation Act.

Source: DMO and SEC

We can also look at Companies' CSR commitments

- Total CSR spending of listed companies increased dramatically from N8.75m in 1990 to N11.3bn in 2020.
- Average of 14.5% of has been committed to environment-related CSR activities.
- This percent rose at a time but now declining



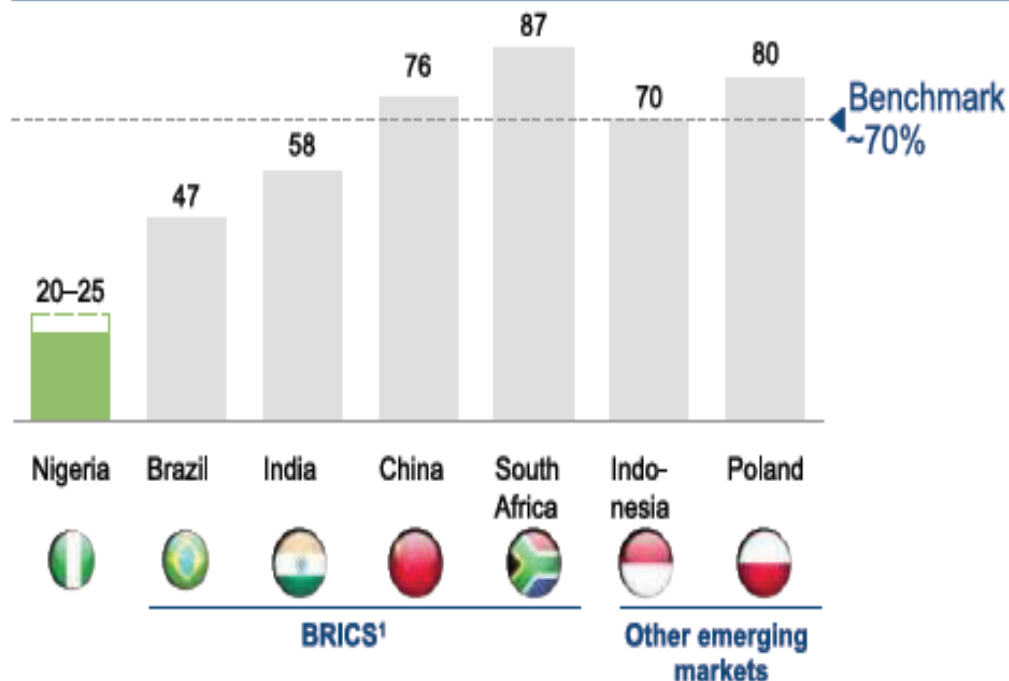
Nigeria's Infrastructure Deficit

Nigeria has to improve its infrastructure to be competitive

- NIIMP (2015) shows Nigeria spends about USD 10 billion per annum on infrastructure
- But it needs to raise it to USD33 billion annually (over 5% of GDP) on average
- Then increase it after 2018 to over 7% of GDP

Total core infrastructure stock, 2012

% of GDP



Sector	Infrastructure Indicators	Status	Potential
Electricity and Renewable Energy	Amount of electricity transmitted across the national grid (MW)	3,592	75,000
	Share of rural population with access to electricity (percent)	30	99
	Percentage of cities with electric power charging stations/ outlets	<1	100
	Percentage of vehicles powered by compressed natural gas (CNG)	<1	30
	Share of renewables in total electricity transmitted (percent)	22	55
Road Transport	Length of paved road (KM)	60,000	110,000
	Percentage of roads under regular maintenance and repair	45	100
Rail Transport	Track kilometres (km)	4,332	15,162
Maritime Transport	Length of navigable Inland waterways (Km)	3,000	10,000
	Reduce the Turn-Around-time of vessels (Days)	4.5	0.80
Aviation Sector	Quality of air transport infrastructure 1-7 (best)	4.35	6.5
Nigeria Ports	Ranking of Nigerian Ports in the sub-region (Rank in the Sub-region)	5	1
	Cargo Dwell Time (Days)	20	2
	Manual Documentation and cargo clearing processes (Percent)	90	Zero
ICT and Science and Technology	Global Innovation Index Rank	117/131	50
	High-technology exports (% of manufactured exports)	6.94	20
	E-Government Development Index (EGDI) Ranking	141/193	50
	Percentage of population using Internet (percent)	40.0	90

Selected Cases of Sustainable Financing of Infrastructure

United States

- Impact bonds (payment by results).
- Forest Resilience Impact Bonds was developed to fund forest restoration and management in the western USA, to minimize the risk of wildfires and increasing water yield.
- Independent evaluators will determine the benefit derived by restoring the forest.
- The United States Forest Service will pay a fee based on the evaluated cost savings of fighting forest fires;
- Water and electricity utilities will pay an annual fee based on the benefits estimated by the evaluators,
 - or will pay competitive prices for the additional water volumes or improved water quality.
- A proposal was also made for Municipal Adaptation Bonds, which would provide a framework for governments to monetise avoided costs from extreme weather events,

India

- India has raised 22 bonds worth \$7,992 million to finance sustainable projects since 2018 - Bloomberg.
- Growth of financing for Electric Vehicles rose from INR 1.8 thousand crores (USD 269 million) in FY2019 to INR3.4 thousand crores (USD 481 million) in FY2020.
- The government of India established the National Clean Energy Fund, now known as the National Clean Energy & Environmental Fund (NCEEF) to sponsor projects within the domain of sustainable developments.
- The Indian Renewable Energy Development Agency (IREDA) lends a part of the NCEE funds to banks at a 2% interest rate which the bank loans out for renewable energy projects at a concessional interest.
- The IREDA also received funds from the World Bank and lends the same to developers of renewable energy projects.
- It also offers capital subsidies for solar water heater systems, and generation-based incentives for solar and wind projects.

China

- China has raised 183 bonds worth \$63bn to finance sustainable projects since 2018 - Bloomberg.
- China's first dedicated environmental fund, which will invest in green projects and firms, has already raised 88 billion yuan (\$12.59 billion) in its first phase,.
- Over the 2016-2020 period, the central government allocated 78.3 billion yuan to combat water pollution, 97.4 billion yuan on air pollution and 28.5 billion yuan on soil pollution, as well as another 20.6 billion yuan to tackle environmental problems in rural regions.
- Green loan represents 90% of the green finance funding and by the end of 2021, China's green loan balance in RMB and foreign currencies reached RMB 15.9 trillion, representing a 33% increase compared to 2020, and was ranked first in the world in terms of green loan balance.
- Since 2018, banking financial institutions would be assessed internally by PBOC based on the amount, percentage, increase and other criteria of the green loans granted by such institution. Many banks have set decarbonisation targets for themselves and percentage targets for green loan.

- Resilience is a measure of how robust a financial plan and money are to shocks.
- It is how investors are able to meet their long-term objectives or how their portfolio delivers the returns needed to reach a financial target at the time it's needed.
- Resilience is more important during crisis, just as we currently have globally.
- Can therefore be described as the capacity to recover quickly from difficulties.
- To be resilience, investors need to:
 - Build up a sufficient (but not excessive) buffer of cash
 - Invest in a well-diversified portfolio
 - Take the long view and look for alternatives
 - Research into investments and seek expert advice
 - Look out for investment fraud.

Commitment to ESG cause and willingness to take discount on return even during crisis

Hedging and trade off such that sustainable projects perform in opposite direction or have low correlation with traditional ones

More investors means more resilience as some leave others are waiting to enter

Good ESG practice may lead to better performance, especially in the long-run, hence making investors resilient as crisis are averted.

- Sustainable Finance has grown globally over time
- Many countries have used it to finance their infrastructure development, especially with the increasing awareness of climate issues
- Nigeria has huge infrastructure deficit, awaiting finance
- Nigeria also has environmental challenges
 - exemplified by effect of oil spillage and the recent flood
- But Nigeria has not adequately leveraged sustainable finance in its infrastructure development and environment resilience
- The country can learn from other countries that have successfully done this.
- Encourage investors to be interested in sustainable finance and be willing to participate
 - This can contribute hugely to their resilience
- We need to create adequate incentives for issuers to go the way of sustainable finance
 - The use of Ecological Fund
 - ESG Rating is very key, and it is one of the major projects we are working on at Analysts' Data Services and Resources



