

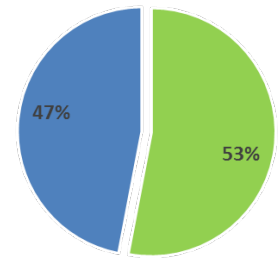
Nigeria



Social and economic set-up

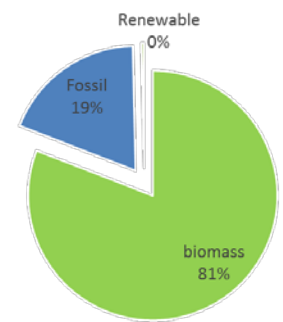
	Year	Unit	Value
Total population	2014	Million	177.5 ¹
Population growth	2014	%	2.7 ¹
Surface	2014	km ²	923,770 ¹
GDP (current US\$)	2014	Billion USD	568.5 ¹
GDP per capita (current international \$)	2014	USD per cap	3,202 ¹
GDP growth	2014	Annual %	6.3 ¹
Fragile state	2014	Status	Yes ² (lower middle income)
Governance (Mo Ibrahim index)	2014	Index/rank	45.8/37 ³
Variation of governance over 5 years	2014	Index	+0.6 ³
Human development index	2013	Index/rank	0.504/152 ⁴

■ Rural population
■ Urban population



Energy used (1 million toe = 11,65 MWh)

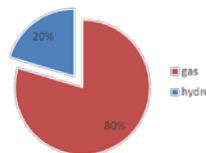
	Year	Unit	Value
Primary Energy – TPES	2013	Million toe	133.5
Primary Energy – Biomass	2013	Million toe	108.8
Primary Energy – Fossil	2013	Million toe	24.2
Primary Energy – Renewable (incl. hydro)	2013	Million toe	0.458
Primary Energy – Electricity import	2013	Million toe	0
Primary Energy – Net oil import	2013	Million toe	-103.0
Final Energy – Total	2013	Million toe	117.1
Final Energy – Modern energy BLEN ⁶	2013	Million toe	5.3
Final Energy – Electricity	2013	TWH	23.4



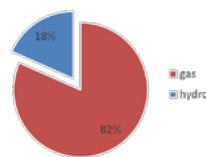
Electricity

Peak demand	
Installed connected capacity	
Thermal installed capacity (fossil fuels)	
Hydro installed capacity	
Renewable installed capacity (excl. hydro) ¹¹	
IPP/installed capacity	
Electricity generation	
Electricity generation from fossil fuels	
Electricity generation from hydro	
Electricity generation from renewable (excl. hydro)	
Electricity consumption including self-consumption and losses	
Average energy consumption/capita	
Losses (total, technical and non-technical) as % of the production	
Losses (total, technical and non-technical)	
Imports (+) exports (-)	
Total electrification rate ⁷	
Urban/rural electrification rate ⁷	
HV lines ⁸	
MV lines ⁸	
LV lines ⁸	
Renewable energy/total electricity generation	
Connections to low voltage grid	
Average tariff/social	
Ratio cost/tariff	

Electricity Capacity MW 2014



Electricity Sources GWh 2013



	Year	Unit	Value
Peak demand	2011	MW	9,051 ⁵
Installed connected capacity	2014	MW	8,772 ⁵
Thermal installed capacity (fossil fuels)	2014	MW	6,985 ⁵
Hydro installed capacity	2014	MW	1,787 ⁵
Renewable installed capacity (excl. hydro) ¹¹	2014	MW	0 ⁵
IPP/installed capacity	2014	%	5.8 ⁵
Electricity generation	2013	GWh	28,961 ⁵
Electricity generation from fossil fuels	2013	GWh	23,635
Electricity generation from hydro	2013	GWh	5326
Electricity generation from renewable (excl. hydro)	2013	GWh	0
Electricity consumption including self-consumption and losses	2013	GWh	28,961 ⁵
Average energy consumption/capita	2013	KWh per cap	163 ⁵
Losses (total, technical and non-technical) as % of the production	2012	%	34
Losses (total, technical and non-technical)	2013	GWh	9,846
Imports (+) exports (-)	2012	GWh	0 ⁵
Total electrification rate ⁷	2013	%	16 ⁵
Urban/rural electrification rate ⁷	2013	%	62/14.7
HV lines ⁸	2014	km	14,550 ⁵
MV lines ⁸	2013	km	To be confirmed
LV lines ⁸	2013	km	To be confirmed
Renewable energy/total electricity generation	2013	%	20
Connections to low voltage grid	2013	Thousand	4,600 ⁵
Average tariff/social	2013	US\$/kWh	To be confirmed
Ratio cost/tariff	2013	%	To be confirmed

1 <http://data.worldbank.org/>; 2 no/yes (low/lower middle/upper middle) www.oecd.org/dac/incaff/FSR-2014.pdf, siteresources.worldbank.org/EXTLICUS/Resources/511777-1269623894864/HarmonizedlistoffragilestatesFY14.pdf; 3 www.moibrahimfoundation.org/interact (rank on 52 countries; rank 1 Mauritius 81.7; rank 52 Somalia 8.6);

4 hdr.undp.org/en/countries/profiles/NGA; 5 Presidential Task Force on Power PTFP www.nigeriapowerreform.org; 6 BLEN comprises GPL, electricity, natural gas and biogas;

7 Calculated as population with access to an electricity source in their habitat compared to the entire population; 8 High Voltage (>50 kV), medium voltage (1-50 kV), low voltage (<1000 V); 11

Renewable excluding hydro (waste, biomass, biogas, geothermal, solar, wind, marine).



Legal, regulatory and institutional framework

Energy policy	The Federal Ministry of Scientific Research (FMSR) is involved in the power sector through the Energy Commission of Nigeria (ECN) that is involved in the energy policies vis-à-vis the Federal Ministry of Power (FMPO)
Energy law	Electricity Power Sector Reform Act (2005) (EPSRA); MYTO I&II (2008 & 2012) relative to prices of electricity through all the channel; REFIT (2012) relative to electricity prices from renewable energy sources; Upcoming Petroleum Industry Bill (PIB)
Ministerial implementation decrees	Many draft/existing policies lack implementation and follow-up systems
Electricity/energy regulator	Nigerian Electricity Regulatory Commission (NERC)
Operators in charge of electricity	6 successor Gencos + 10 National Integrated Power Project (NIPP) + more than 70 IPP; Nigerian Bulk Electricity Trading (NBET) ; Transmission Company of Nigeria (TCN); 11 Discos
Institution in charge of rural electrification	Limited alignment of activities of the Rural Electrification Agency (REA) and State Rural Electrification Board (SREB)
Institution in charge of renewable energy	The Federal Ministry of Environment (FME) is in charge of sustainable development policies in Nigeria. It is involved and undertakes the development of renewable energy projects. The Federal Ministry of Water resource (FMWR) overlooks all the hydraulic resources management in the country. It is involved in the development of the hydro-power projects.
Institution in charge of energy conservation and energy efficiency	Market/Energy Efficiency and Renewable Energy unit (MEER) at PTFP
Energy objectives	To make reliable electricity available to 75% of the population by 2020 and 100% by 2030. Connect an average 1.5 million households per year. Increase maximum transmission capacity from 5.5 GW to 20 GW by 2020.
Policy for energy purchase tariff	The prices from the Gencos to NBET are set up by a Purchase Power Agreement (PPA). Renewable energy projects by the private sector are not subject to a licence from NERC when they are below 1 MW. However, when the capacity is above 1 MW, the private sector developers become new Gencos and have the same type of pricing regulation through REFIT (Renewable Energy Feed-In Tariff).
Policy for net metering	Inexistent
Public procurement procedures	To be confirmed
Unbundling of production/transport/distribution	The unbundling of the electricity sector led to creation of generation and distribution companies with major private sector participation while the transmission is left in the public hands.

Private sector and business environment

Institutions in charge of private sector promotion	Nigerian Investment Promotion Commission (NIPC) established by the NIPC Act No. 16 of 1995 (now Cap N117 LFN 2004)
Incentives measures	Mechanisms have been put in place to incentivize the private sector initiatives including free trade zones; protection of investment against expropriation and nationalization; free repatriation of funds; deregulation in the oil & gas sector with private sector participation and competitive incentive
Traditional subsidies	The subsidy regime to the energy sector ended in June 2013; In 2014, Central Bank of Nigeria's (CBN) provided approximately N213 billion to address the market revenue shortfalls that have impacted negatively on the electricity market from the handover of the successor companies in September, 2013, as well as payment of legacy gas supply debt.
IPP (Independent power producer)	Ibom (113 MW), AES (240 MW), AFAM I&II (160MW); 343 MW to come in 2015
Public-Private partnership	Island Power Project (10 MW + 18 km dedicated underground distribution system) is a PPP between LASG and Island Power Limited to supply priority public load in Lagos city.
Business index	Ranked 170 out of 189 economies in 2015 up by 5 places compared to 2014 (World Bank – doing business)

International cooperation in the energy sector

Joint Declaration EU-Country	Yes signed on 7 December 2015 together with Germany, France, Italy, Spain and UK
Energy as focal sector in the 11th EDF	Energy is a focal sector for 11th EDF(150 M€ are dedicated to rural electrification development in Northern States of Nigeria)
Active donors	EU, WB, DFID, USAID, EIB, AfDB, JICA, AFD, KFW, GIZ
Sectorial coordination mechanism	To be confirmed

Main concerns

- Enhance gas supply infrastructure connectivity and repair vandalized gas pipelines; adopt commercial price regime for gas; target zero gas flaring
- Increase the available capacity rate of oil refineries and reduce import of petroleum products
- In absence of cost reflective tariff, DisCos, are unable to meet obligations of upstream service providers and power suppliers
- With cost reflective tariffs, end the electricity market shortfalls that will trigger the declaration of TEM (expected in 2015); the electricity power market will move away from the current Interim Rules Period (IRP) with shortfalls and subsidies towards the Transitional Electricity Market period (TEM) where all electricity trading arrangements are driven by contracts
- Complete the privatization of the National Integrated Power projects (NIPP)
- Remove electricity transmission capacity bottleneck by adequately funding TCN
- Increase access to electricity by closing the gap between coverage and connectivity
- Reduce technical and non-technical losses on the electric grid from currently 10% transmission + 24% distribution
- Define and co-ordinate investment programmes and funding
- Enhance capacity of institutional entities, decision makers and technicians