

**ENERGY EFFICIENCY ACCESSION
REPORT FOR NIGERIA (TO IEC)
CURRENT STATE OF PLAY**

Sulu, B. F. Ibrahim

Director, Energy Management
Energy Commission of Nigeria

Outline

1. The Report

1.1 Purpose

1.2 Scope

1.3 EE Stakeholders

2. Highlights of the Content

2.1 EE Policy Documents

2.2 Main Objectives of EE Policies

2.3 EE Governance and Organogram

2.4 Energy System Efficiency

2.5 EE Financing

2.6 EE Collaborations

3. ECN EE Structure

1.1 Purpose of the Report

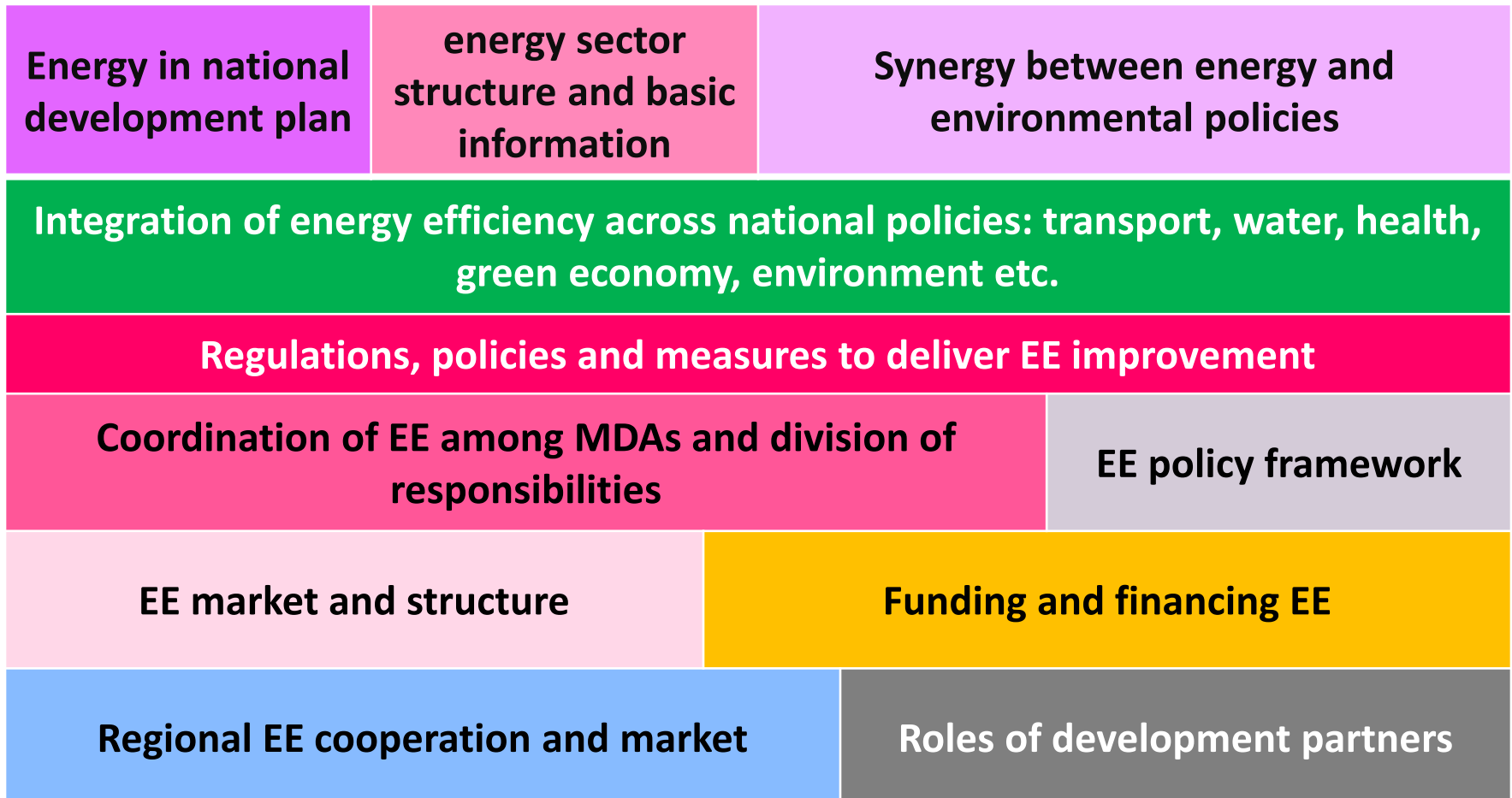
Energy Efficiency Report aims at

- a. establishing the current state of play in Nigeria as regards promoting energy efficiency;
- b. particularly as it relates to compliance with the Energy Charter Treaty and the Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA).
- c. Prepared at the ECS, Brussels; Q4/2019
- d. To be updated!

Note: Rapid and In-depth EE Reports of Other Countries – Guides

1.2 Scope of the Report

It is not an **appraisal** report but a document documenting the current state of play EE in the Country.

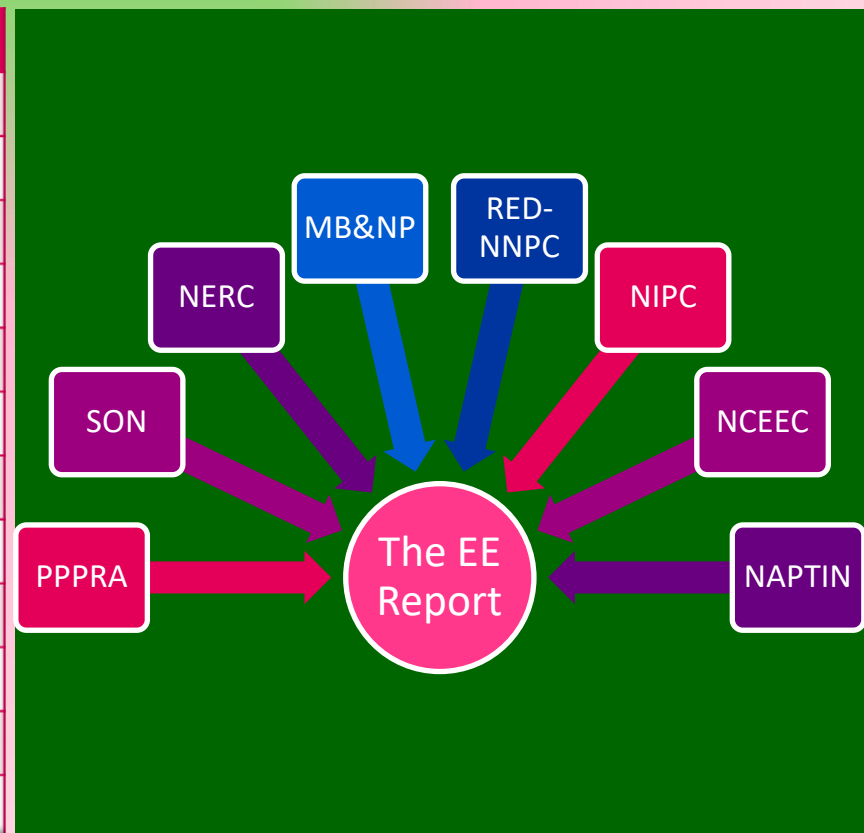


1.3 EE National Stakeholders

Non-Responsive (37)

Responsive (8)

SN	Org.	SN	Org.	SN	Org.
1	NAEC	13	FMTrans	25	MAN
2	ICEED	14	UNIDO	26	JICA
3	NCS	15	NEMSA	27	ECOWAS & ECREEE
4	FMFin	16	REA	28	DPR
5	NNPC	17	FMITI	29	PTDF
6	NACCIMA	18	GIZ	30	TCN
7	MPR	19	FMEEnv.	31	NADDC
8	NBET	20	FMPH&W	32	UNDP
9	CBN	21	BOI	33	NUC
10	NNRA	22	AEPB	34	COREN
11	AfDB	23	NBRRI	35	NSE
12	USAID	24	UKDFID	36	KOICA



Stakeholders responsiveness to our call = 18%

2.1 Relevant Policy Documents to EE

(General) Energy Policy

National Energy Policy, 2003 (2018)

Sustainable Energy Bill, 2019

Rural Electrification Policy, 2009 and Rural Electrification Strategy and Action Plan, 2016

Economic Recovery and Growth Plan, 2017 - 2020

Draft National Integrated Infrastructure Master Plan, 2015

Sustainable Energy for All Action Agenda, 2016

Nationally Determined Contributions, 2015

RE and EE Policy

ECOWAS RE Policy, 2015 and ECOWAS EE Policy, 2015

National Renewable Energy and Energy Efficiency Policy, 2015

National Energy Efficiency Action Plan and National Renewable Energy Action Plan, 2015

Regulation for Mini-Grid, 2016

Sectoral Policy

National Electric Power Policy, 2001 and Electric Power Sector Reform Act, 2005

National Petroleum Policy, 2015 and National Gas Policy, 2015

National Transport Policy, 2010

Nigeria Minerals and Mining Act, 2007

National Automotive Policy, 2013

National Forest Policy, 2006

Agricultural Policy of Nigeria, 2001

National Building Code of Nigeria, 2006 and Building Energy Efficiency Code, 2017

National Policy on Industry

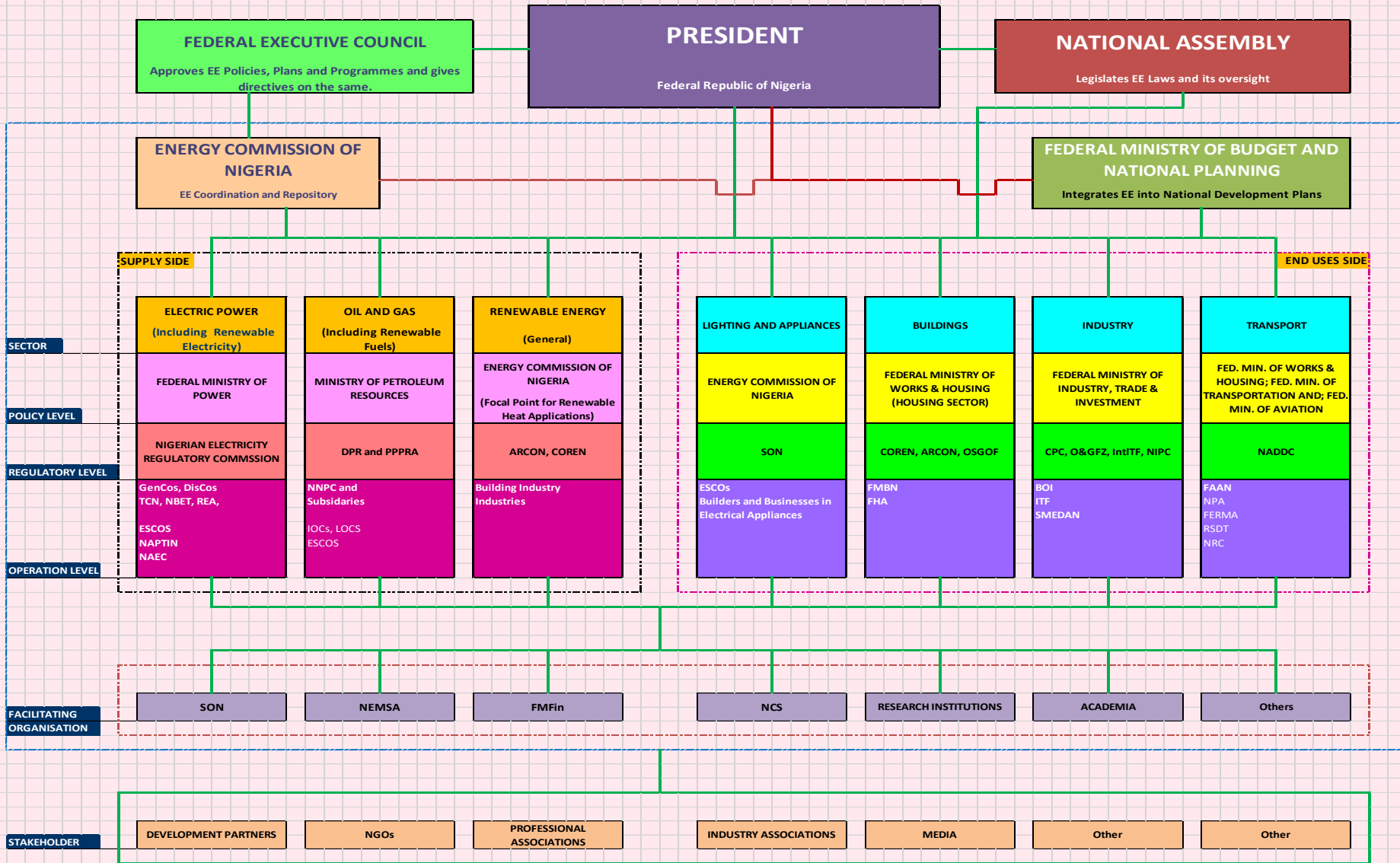
2.2 Main Objectives of EE Policy

Sector	Main Policy Objectives
Buildings, Lighting and Appliances	To ensure that all categories of buildings (residential, commercial, public and industrial) are energy-efficient compliant from the conceptual stage, through design, construction, exploitation to decommissioning and are comfortable for their purpose.
Industry	To ensure quality, adequate and reliable energy supply to the industries using available locally sourced energy types and technologies in an environmentally sustainable manner and at a cost that guarantees competitiveness of the industry, and conforming with global energy efficiency best practices.
Transport	To develop an adequate, safe, environmentally sound, efficient and affordable integrated transport system within the framework of a progressive and competitive market economy in line with global best practice and, standards of fuel efficiency and transportation infrastructure.
Electric Power	To promote the private sector-driven industry to attract investments and guarantee reliable and adequate electricity supply at cost-recovery tariff to all sectors of the economy; and promote energy efficiency in electricity generation, transmission and distribution.
Petroleum	To enhance indigenous capacity in the industry value chain and move Nigeria from a crude oil export-based economy to an attractive private sector driven oil and gas-based industrial economy” and, make the gas stand-alone industry, separate from the oil.
Renewable Energy	To harness all viable new and renewable energy sources (electricity, heat and fuels) sustainably for national development; improve the efficiency of traditional biomass and transit to modern bioenergy, and also pursue peaceful applications of nuclear energy.

2.3 Draft EE Governance and Organogram

SN	Organisation	EE Responsibility
1	President/FEC	To approve EE Policies and Programmes and facilitate EE legislations.
2	NASS	To enact EE laws and perform oversight functions.
3	FMB & NP	To integrate EE plan into National Development Plans.
4	ECN	To coordinate EE policies and plans and serve as National repository for energy efficiency.
5	SON	To set and enforce standards on EE equipment and processes.
6	FMP	To be responsible for EE policies & plans in Electricity Generation, Transmission and Distribution.
7	NERC & NEMSA	To ensure that the regulatory environment in the electric power that is EE compliant.
8	TCN	To ensure energy efficient transmission system.
9	REA	To integrate EE practices into the electrification of the rural, remote and under served communities.
10	MPR	To integrate EE policy and practices into all the value-chain of petroleum industry.
11	NNPC	To ensure marketing of petroleum and products compile with EE practices.
12	PPPRA/NMDPRA	To ensure PPP&R are cost-reflective and recovery.
13	DPR/NUPRC	To ensure a regulatory environment that is pro EE.
14	FMEEnv.	To ensure adoption of EE practices & RE technology in mitigating the impacts of CC on the environment.
15	FMITI	To ensure adoption of IEE and RECP policy and practices in all industrial activities.
16	FMW&H	To ensure the road infrastructure and buildings meet EE requirements
17	FMT	To integrate EE policy and practices into all modes of transportation: fuel efficiency and infrastructure
19	NADDC	To ensure that locally manufactured and assembled, & imported automobiles and components meet EE standards
20	NGOs	To participate in EE activities in line with their aims and objectives.
21	DPs (DOs)	To participate in EE activities in line with their national agenda and Nigerian needs

ORGANOGRAM OF ENERGY EFFICIENCY RELATED INSTITUTIONAL FRAMEWORK



LEGEND

TCN - Transmission Company of Nigeria
NBET - Nigerian Bulk Electricity Trader
REA - Rural Electrification Agency
ESCOS - Energy Service Companies
NAPTIN - National Power Training Institute of Nigeria
NAEC - Nigerian Atomic Energy Commission
SON - Standards Organisation of Nigeria
NNPC - Nigerian National Petroleum Corporation

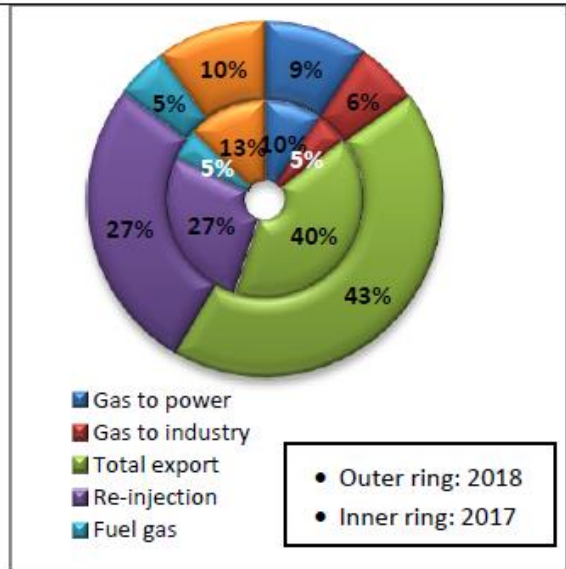
DPR - Department of Petroleum Resources
PPRA - Petroleum Products Pricing and Regulatory Agency
IOCs - International Oil Companies
LOCS - Local Oil Companies
COREN - Council for Registration of Engineering in Nigeria
OSGOF - Office of Surveyor General of the Federation
FMBN - Federal Mortgage Bank of Nigeria
FHA - Federal Housing Authority

NADDCC - National Automotive Design and Development Council
FAAN - Federal Airports Authority of Nigeria
NPA - Nigerian Ports Authority
COREN - Council for Registration of Engineering in Nigeria
OSGOF - Office of Surveyor General of the Federation
FMBN - Federal Mortgage Bank of Nigeria
FHA - Federal Housing Authority

ARCON - Architects Registration Council of Nigeria
ITF - Industrial Training Fund
O&GFZ - Oil and Gas Free Zone
SMEDAN - Small and Medium Enterprises Development Agency
IntITF - International Trade Fairs
NIPC - Nigeria Investment Promotion Commission

2.4 Efficiency of the Energy System

Figure 9: Gas utilization, %



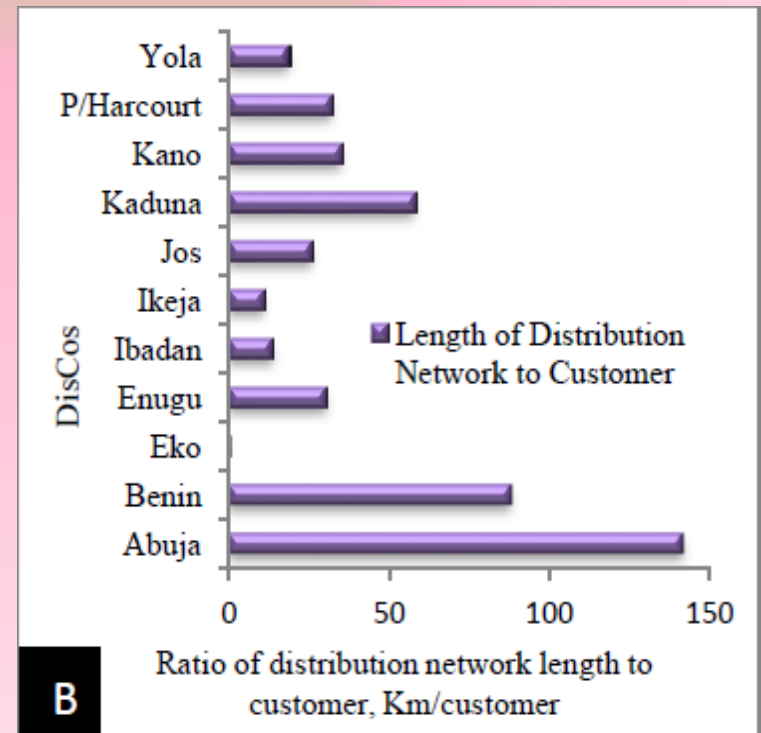
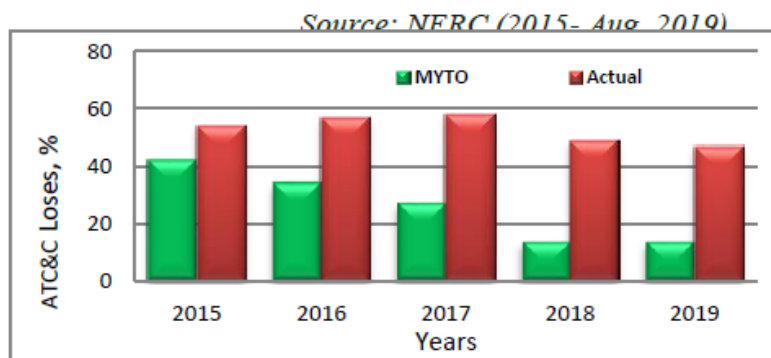
Source: NNPC_ASB, 2017¹⁶-2018

Table 3: DisCos' market perform. indicators (2016 – 2019)¹

Item	GenCos (to NBET)	NBET (to DisCos)
Total Invoice, 10 ⁹ ₦	172.94	168.06
Total Payment, 10 ⁹ ₦	38.31	34.93
Av. Performance Ratio, %	22.15	20.78
Highest Performance Ratio, %	28.77	29.13
Lowest Performance Ratio, %	14.33	10.79

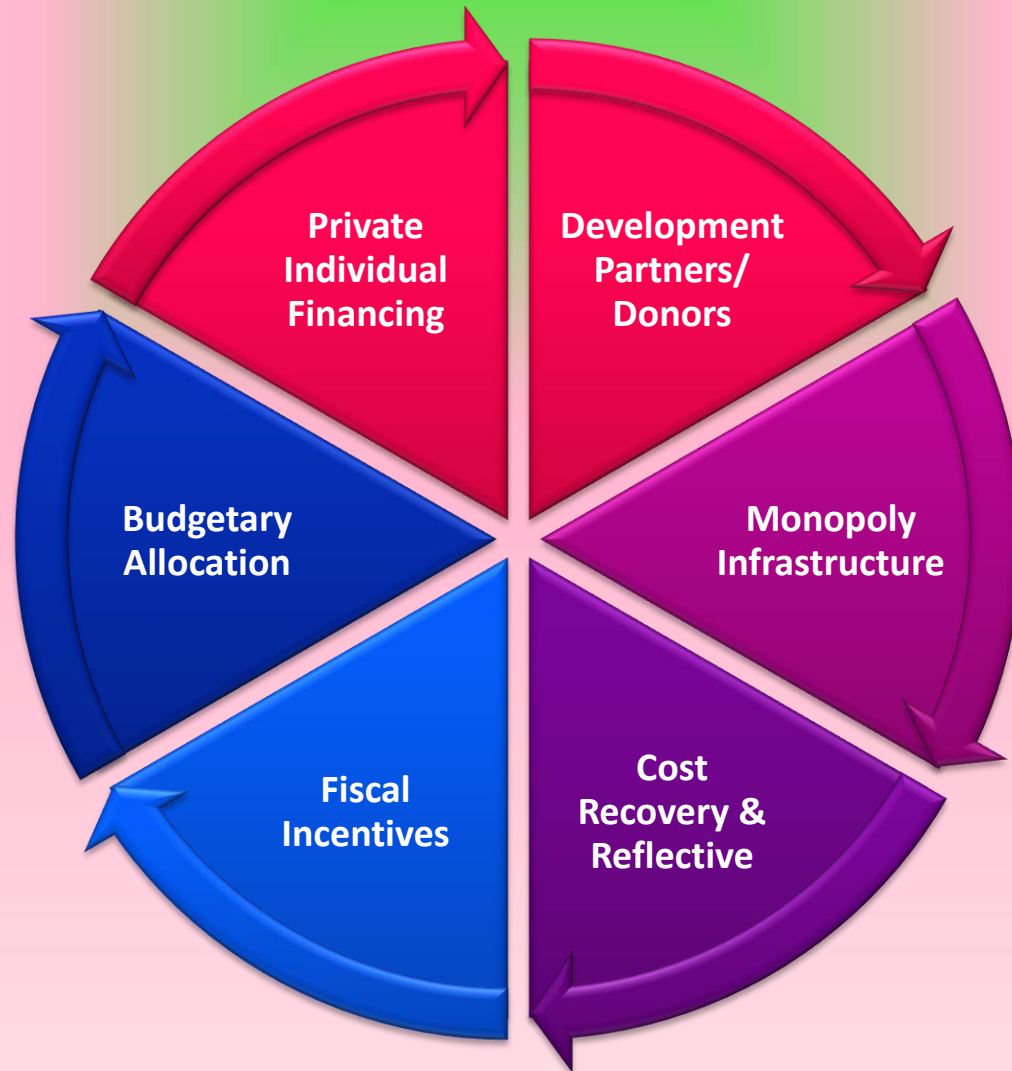
Source: NBET¹¹, 2019

Figure 6: AT&C Loses, 2015-2019



B

2.5 EE Funding, Financing and Incentives



2.6 Regional and International Collaborations

Regional

ECREEE

WAPP/ERERA

Bilateral Electricity Trade with
Niger & Benin

WAGP/WAGPA

Trans-Regional Gas Pipeline Projects: Trans-Sahara
Gas Pipeline & Nigerian-Moroccan Gas Pipeline

International

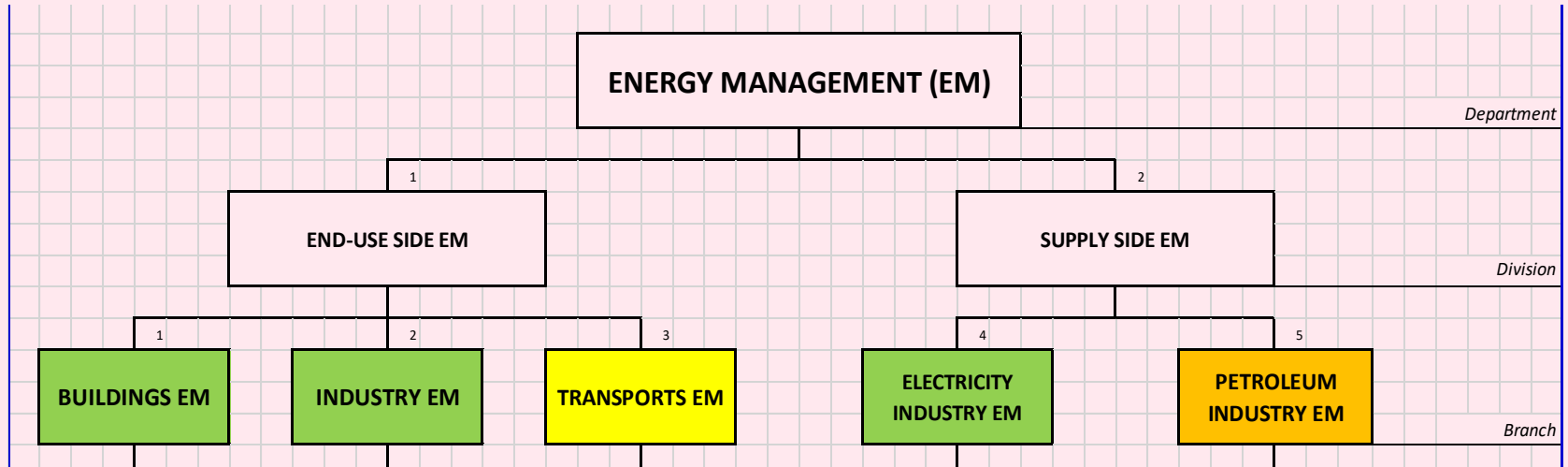
NESP (Nigeria and EU/GIZ)

UNDP/GEF

JICA

SUNREF (AFD)

3. ECN EE Structure



1. To serve as National EE repository: this is to aid the ECN responsibility for strategic planning and co-ordination of national policies in the field of EE in all its ramifications;
2. To monitor the performance of the energy sector in the execution of government policies on EE.

THANK U