Annual Workshop on the ECOWAS Energy Information System

The Gambia – Country Presentation on the National Energy Statistics

29 March - 02 April 2022

Mensvic Hotel (Accra, GHANA)

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Ministry of Petroleum and Energy

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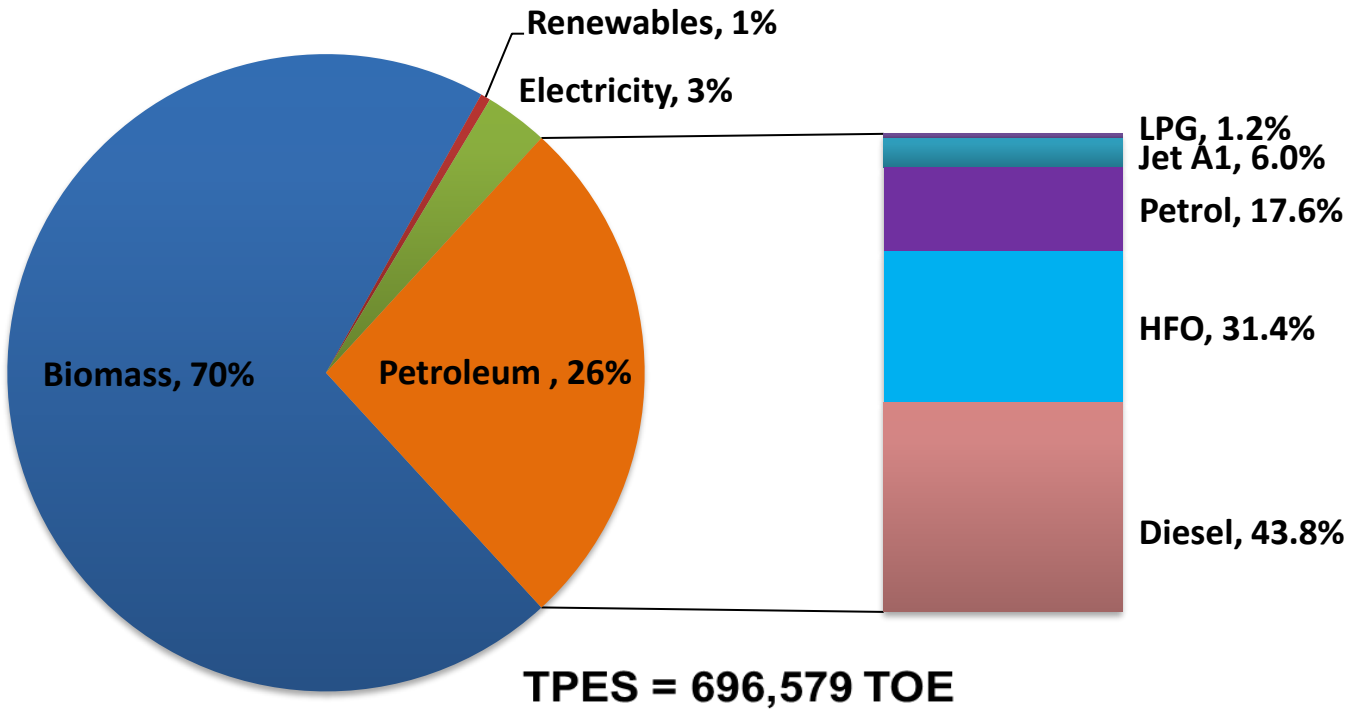
Energy Sector – Overview

TOTAL ENERGY SUPPLY



TPES = 696,579 TOE

Energy Supply and demand

- Relies predominantly on biomass and imported petroleum products for country energy needs
- Largest energy consumers are transport (petroleum) domestic sectors (electricity)

Source: MOPE – Report 2017

Energy Sector – Overview

National Energy Policy

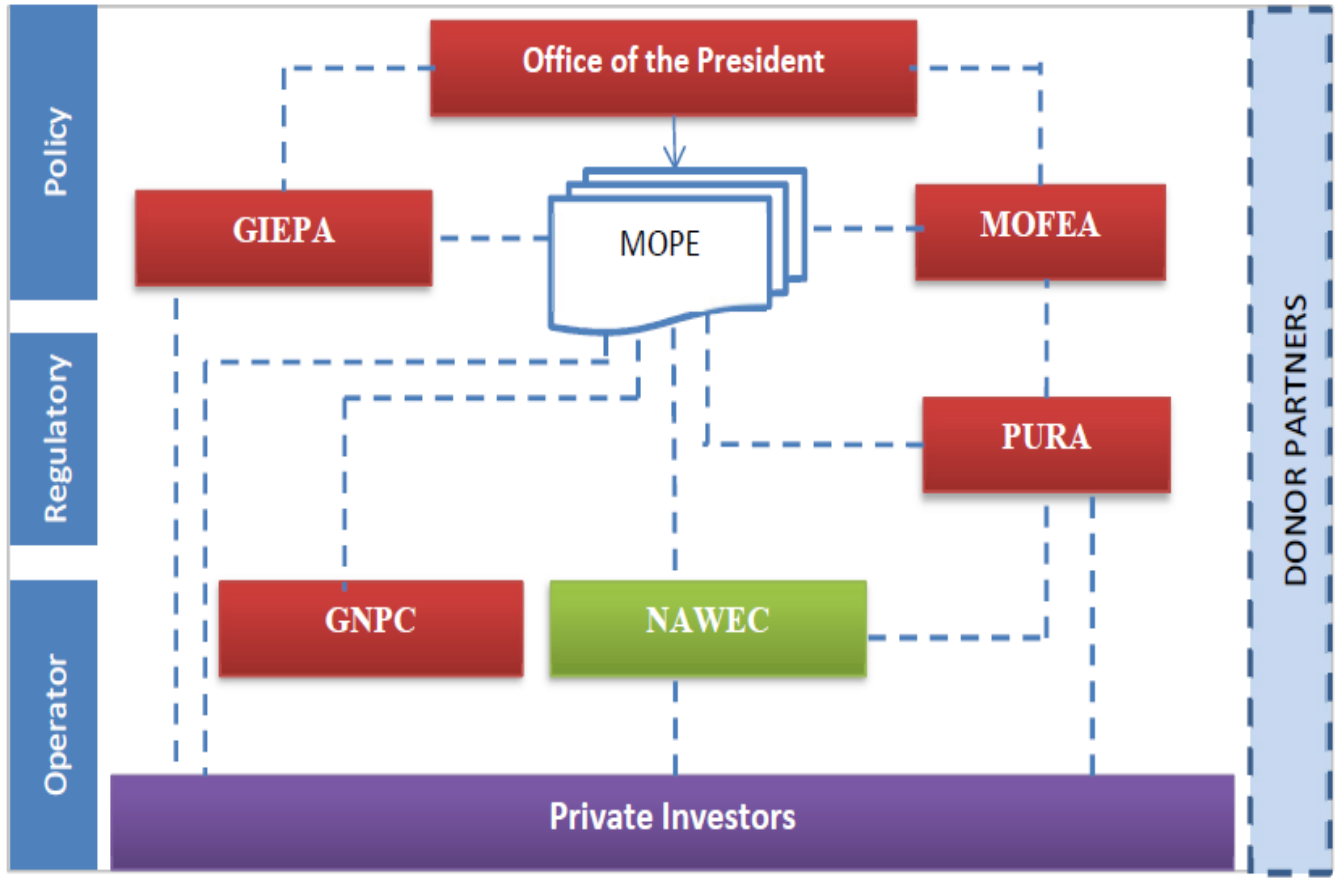
- Updated in 2014; Serves as overarching policy framework for energy sector and sub-sectors (electricity, renewable energy, petroleum)

- Policy objectives:
  - Improve and expand energy supply;
  - Reduce dependence on petroleum imports;
  - Strengthen institutional and human capacity;
  - Energy security (diversification, regional integration)
  - Reduce inefficient energy use

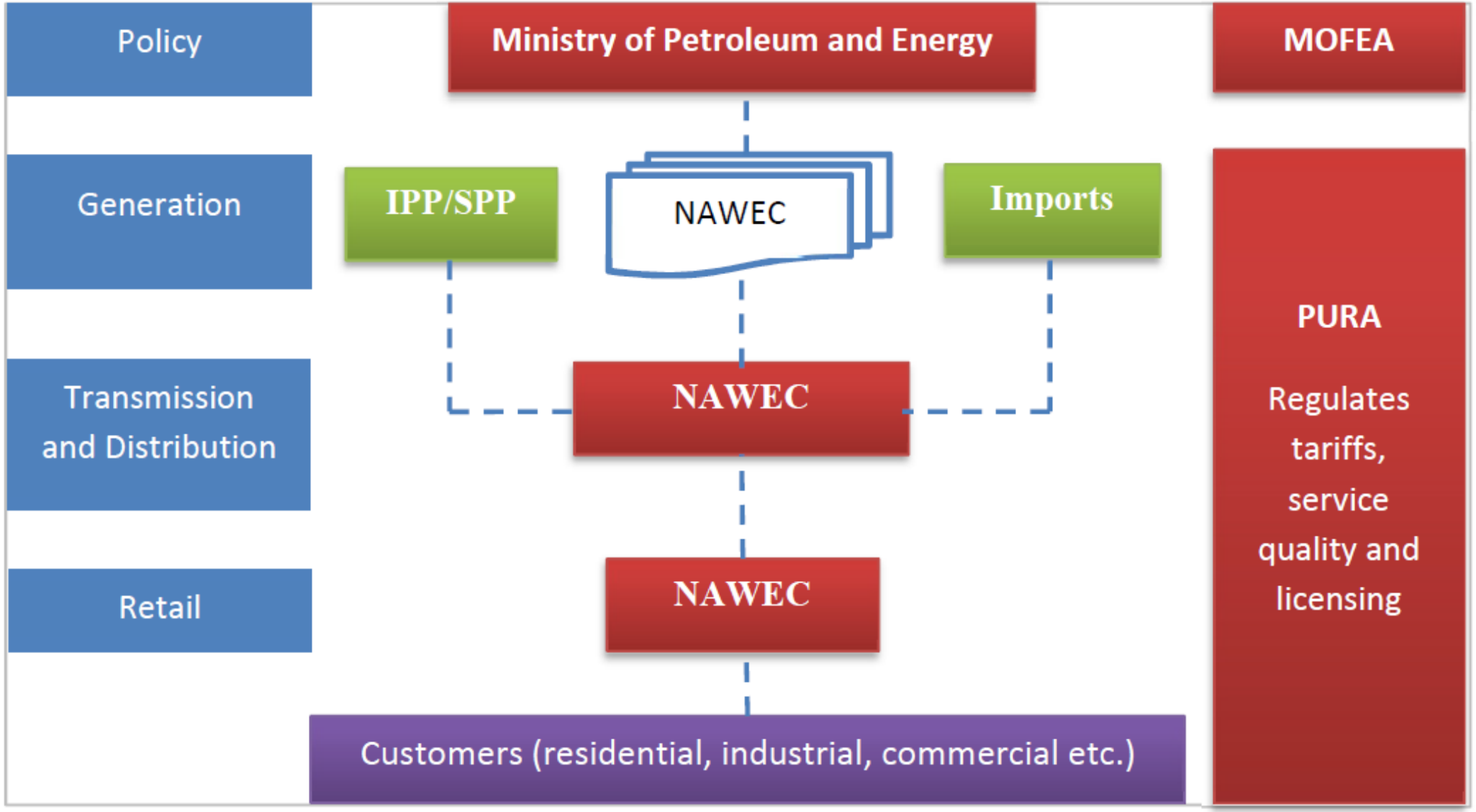
Legislative Instruments

- Electricity Act (2005);
- PURA Act (2011);
- Renewable Energy Act (2013)

Institutional Framework



Electricity Sub-Sector – Governance Structure



Country Factsheets

PARAMETERS	2019	2020
Number of inhabitants	***2 213 174***	***2 279 884*** *Source: Gambia Bureau of Statistic (GBoS)*
Total number of households or Average number of people per households	***266 647*** households 8.3 people per household *Source: Gambia Bureau of Statistic (GBoS)*	***274 684*** households ***8.3*** people per household *Source: Gambia Bureau of Statistic (GBoS)*
Total grid-connected electricity installed capacity in MW	***147*** *MW* *Source: NAWEC*	***147*** *MW* *Source: NAWEC*
Total grid-connected electricity generation in MWh	***433*** *GWh* *Source: NAWEC*	***433*** *GWh* *Source: NAWEC*
Total MWh of electricity imported (only if applicable to your country)	***13*** *GWh* *Source: NAWEC*	***13*** *GWh* *Source: NAWEC*

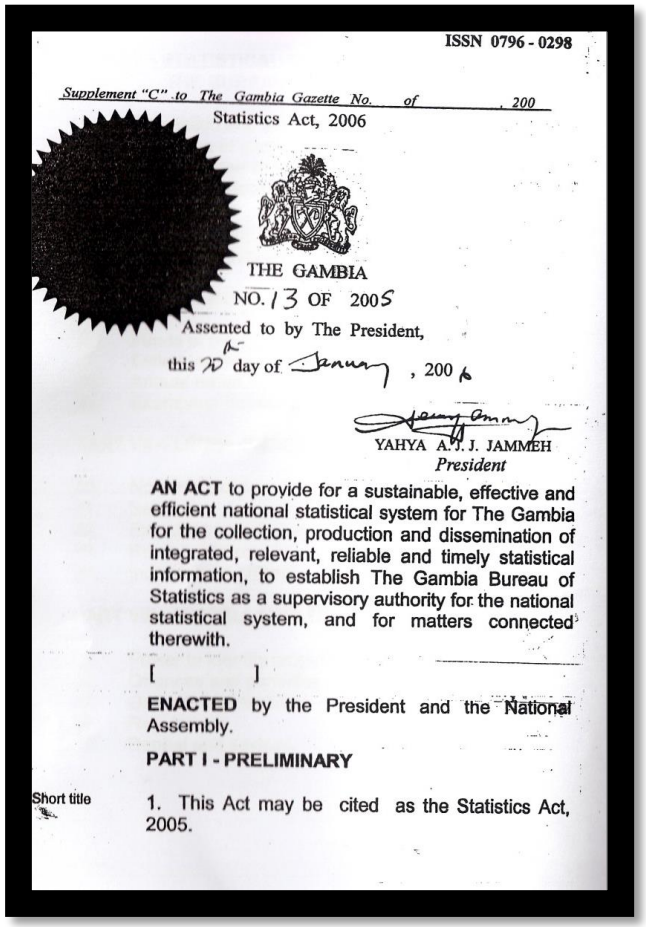
PARAMETERS	2019	2020
Share of household connected to an electricity grid (national grid and mini-grids) in %	***65.6 %*** *Source: NAWEC*	***65.6*** *%* *(Urban 79.1% & Rural 22.5%)* *Source: GBOS & NAWEC*

PARAMETERS	2019	2020
Share (%) of households with access to improved cook-stoves (ICS)	***63 %*** *Source: SE4ALL AA*	***63 %*** *Source: SE4ALL AA*
Share (%) of households with access to modern alternatives for cooking (e.g. LPG, biogas, solar cookers, kerosene, ethanol gel, electricity, etc.)	***59 %*** *Source: SE4ALL AA*	***59 %*** *Source: SE4ALL AA*

Institutional anchoring of data collection and publication

The Gambia Bureau of Statistics is the principal body responsible for collecting, analysing and disseminating statistical data. It is the successor to the Central Statistics Department that was operating under the Statistics Act of 1972. The Bureau replaced the Central Statistics Department following the enactment of the new Statistics Act in 2005.

The Ministry of Petroleum and Energy (MoPE) was formally created in 2016 following the merger of the Ministry of Energy and Ministry of Petroleum and is also granted purview of the Geological Department in 2017.



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Statistics Act, 2006

THE GAMBIA

NO. 13 OF 2005

Assented to by The President,

this 20 day of January , 2006

YAHYA A.J.J. JAMMEH
President

AN ACT to provide for a sustainable, effective and efficient national statistical system for The Gambia for the collection, production and dissemination of integrated, relevant, reliable and timely statistical information, to establish The Gambia Bureau of Statistics as a supervisory authority for the national statistical system, and for matters connected therewith.

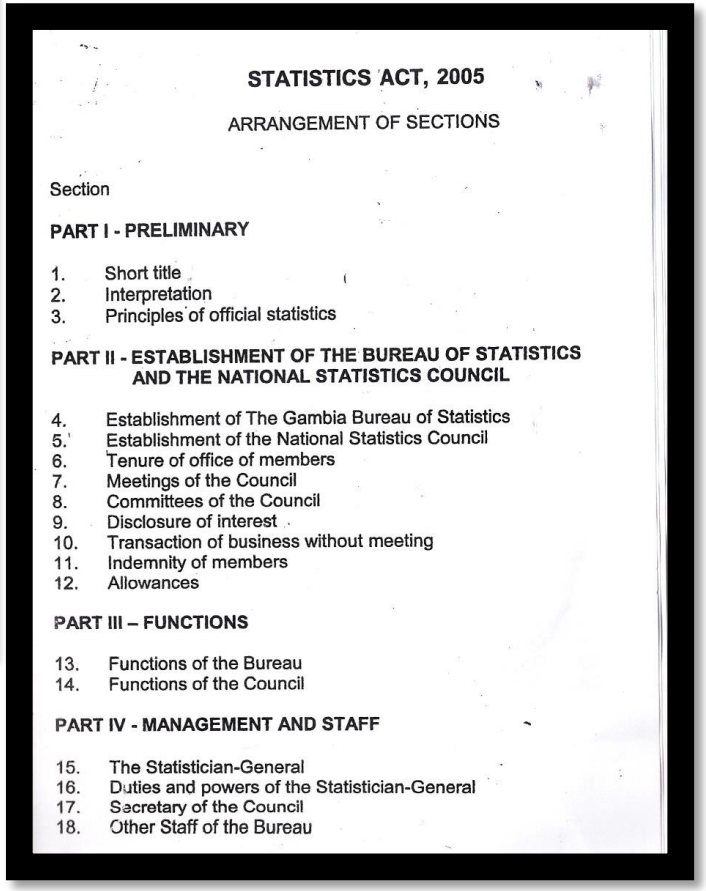
[ ]

ENACTED by the President and the National Assembly.

PART I - PRELIMINARY

Short title

1. This Act may be cited as the Statistics Act, 2005.



STATISTICS ACT, 2005

ARRANGEMENT OF SECTIONS

Section

2

Methodology of data collection

Development of Data Requirement

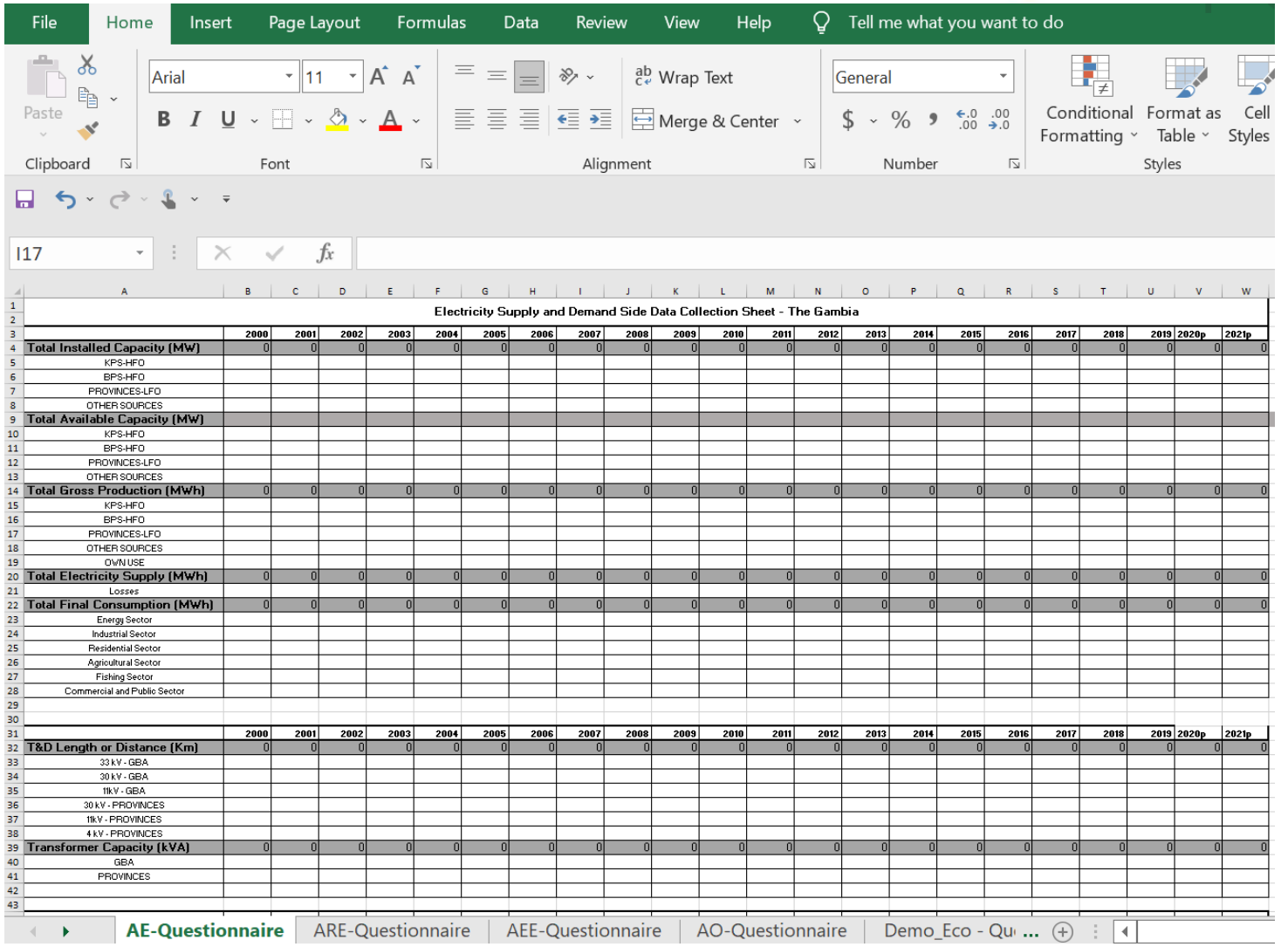
Identification of Institution, the Data can be obtained

Development of Data Collection Templates

Write letters to Institutions to obtain data / Conduct survey with relevant institutions to obtain the Data

- MOPE
- NAWEC
- GNPC
- GBOS

- REAGAM
- ASCEG
- PURA



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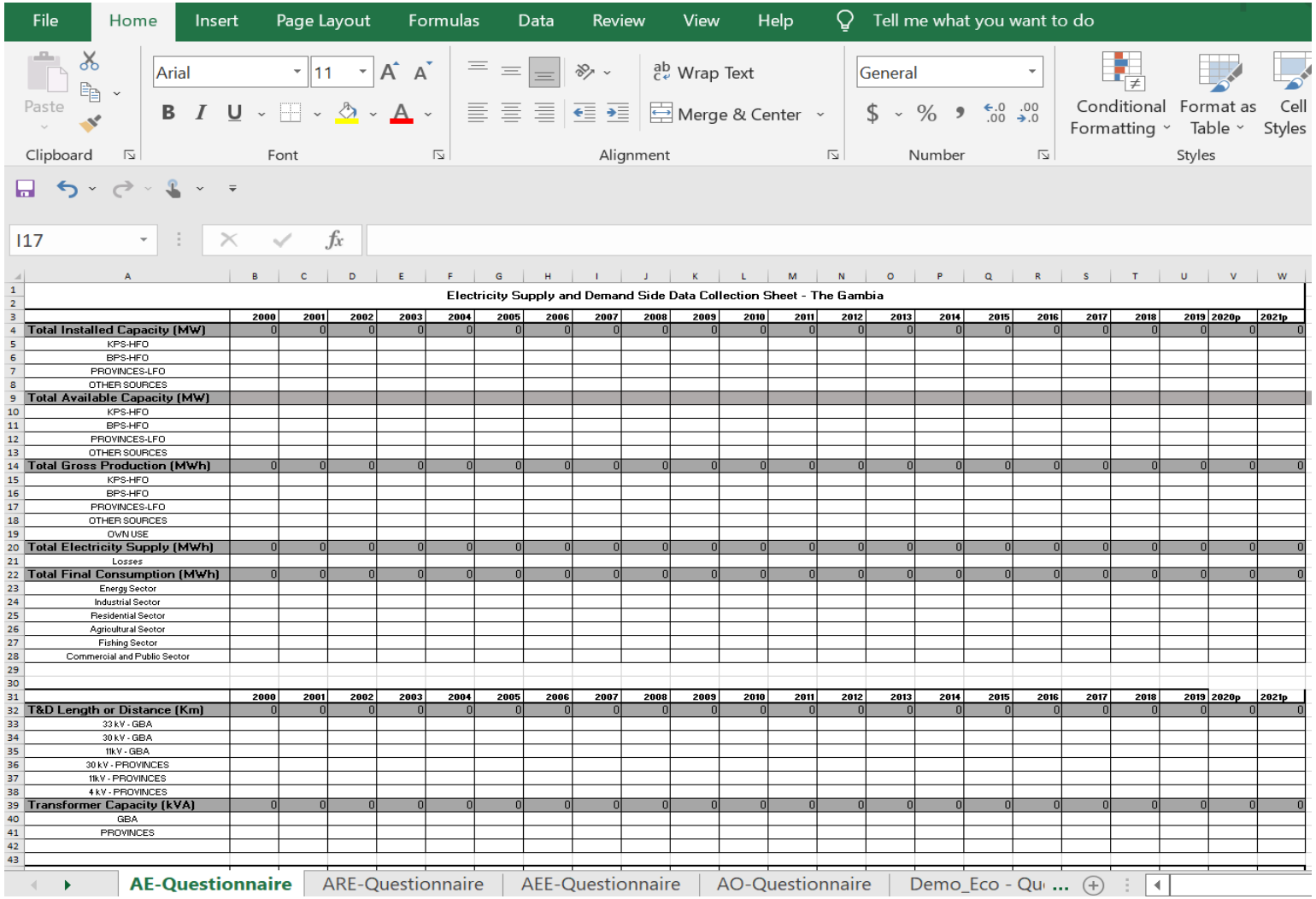
Data collected



Annualized questionnaires on:

- *Electricity*
- *Renewable Energy Including Biomass*
- *Energy Efficiency*
- *Oil*
- *Eco-demo*

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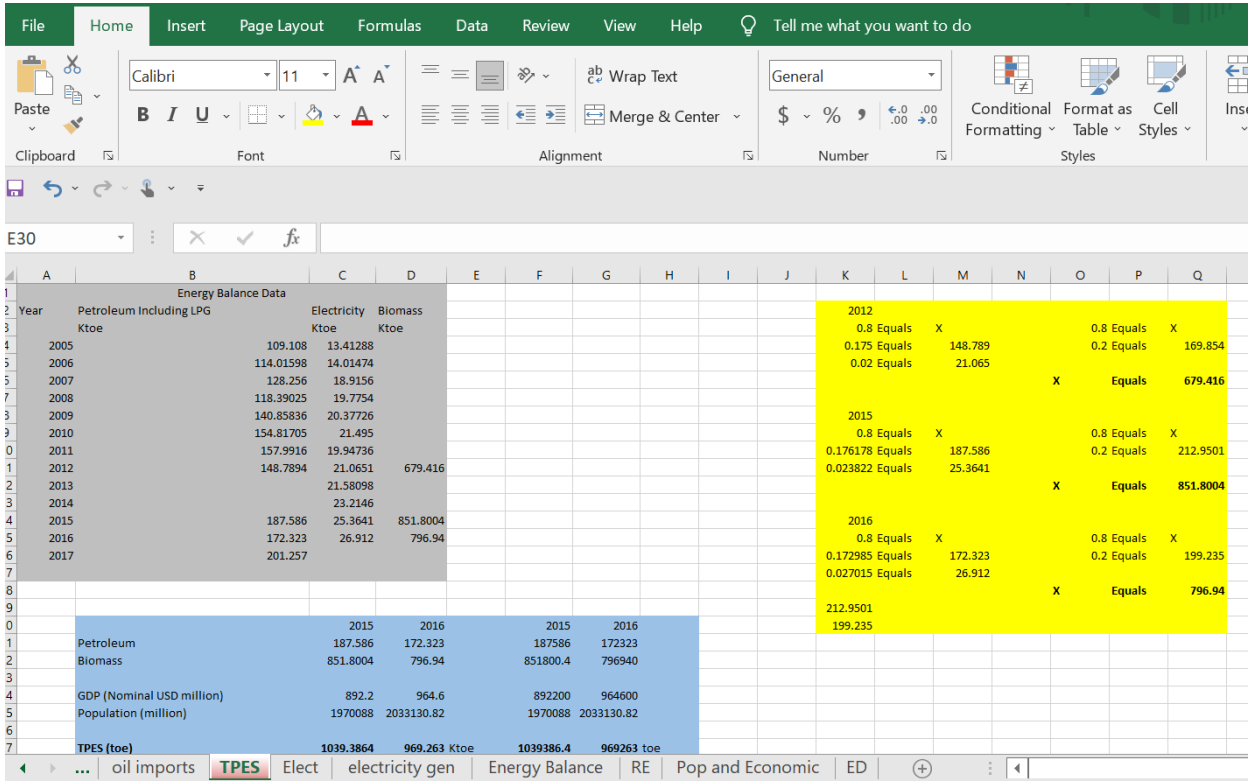
Tools used in the development of the national energy balance and indicators from statistics



Energy Balance Data

Year	Petroleum Including LPG (Ktoe)	Electricity (Ktoe)	Biomass (Ktoe)
2005	109.108	13.41288	
2006	114.01598	14.01474	
2007	128.256	18.9156	
2008	118.39025	19.7754	
2009	140.85836	20.37726	
2010	154.81705	21.495	
2011	157.9916	19.94736	
2012	148.7894	21.0651	679.416
2013		21.58098	
2014		23.2146	
2015	187.586	25.3641	851.8004
2016	172.323	26.912	796.94
2017	201.257		

	2015	2016	2015	2016
Petroleum	187.586	172.323	187586	172323
Biomass	851.8004	796.94	851800.4	796940
GDP (Nominal USD million)	892.2	964.6	892200	964600
Population (million)	1970088	2033130.82	1970088	2033130.82
TPES (toe)	1039.3864	969.263 Ktoe	1039386.4	969263 toe

2012
0.8 Equals X 0.8 Equals X
0.175 Equals 148.789 0.2 Equals 169.854
0.02 Equals 21.065
X Equals 679.416

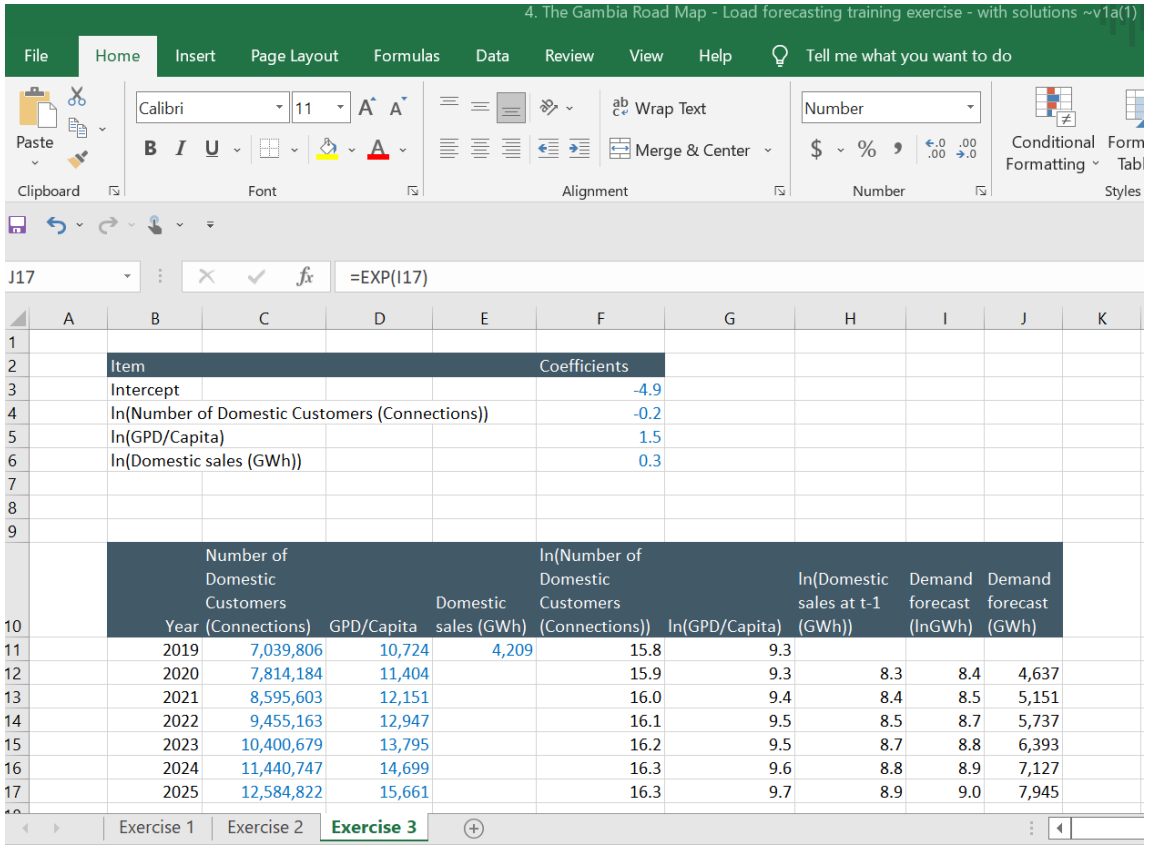
2015
0.8 Equals X 0.8 Equals X
0.176178 Equals 187.586 0.2 Equals 212.9501
0.023822 Equals 25.3641
X Equals 851.8004

2016
0.8 Equals X 0.8 Equals X
0.172985 Equals 172.323 0.2 Equals 199.235
0.027015 Equals 26.912
X Equals 796.94

212.9501
199.235

Generation of national energy balances

Estimation national electricity demand



Item	Coefficients
Intercept	-4.9
ln(Number of Domestic Customers (Connections))	-0.2
ln(GPD/Capita)	1.5
ln(Domestic sales (GWh))	0.3

Year	Number of Domestic Customers (Connections)	GPD/Capita	Domestic sales (GWh)	ln(Number of Domestic Customers (Connections))	ln(GPD/Capita)	ln(Domestic sales at t-1 (GWh))	Demand forecast (lnGWh)	Demand forecast (GWh)
2019	7,039,806	10,724	4,209	15.8	9.3			
2020	7,814,184	11,404		15.9	9.3	8.3	8.4	4,637
2021	8,595,603	12,151		16.0	9.4	8.4	8.5	5,151
2022	9,455,163	12,947		16.1	9.5	8.5	8.7	5,737
2023	10,400,679	13,795		16.2	9.5	8.7	8.8	6,393
2024	11,440,747	14,699		16.3	9.6	8.8	8.9	7,127
2025	12,584,822	15,661		16.3	9.7	8.9	9.0	7,945

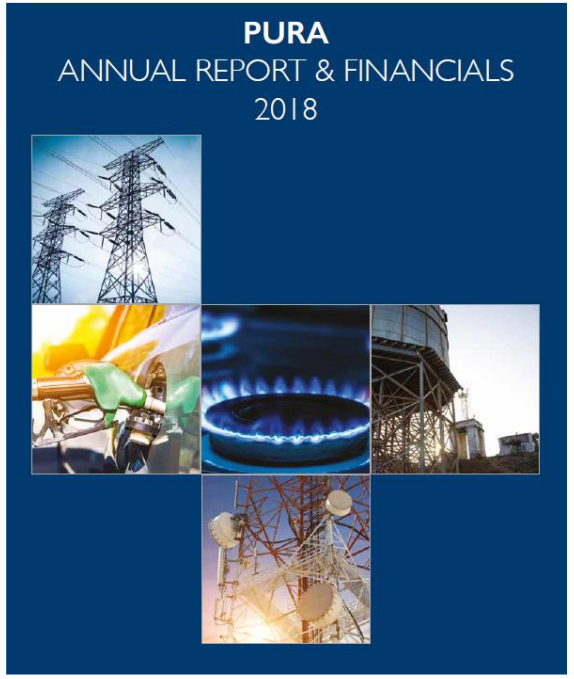
Tools used in the dissemination of statistics to the public

Websites

- NPIS /EIS
- MOPE (mope.gm)
- PURA (pura.gm)
- GBOS (gbosdata.org)

Reports

- PURA's Annual Report
- NAWEC's Annual Report



National Water and Electricity Company Limited
Annual Report and Financial Statements for the year ended 31 December 2016

Status of Energy Efficiency

Targets for Energy Efficient Lighting

	2013	2020	2030
Penetration rate of on-grid, energy efficient lights (%)	0	100	100
Penetration rate of off-grid, energy efficient lights (%)	0	100	100
Percentage of public street lights that are high efficiency (%)	0	n.a.	n.a.

Targets for High Performance Distribution of Electricity

	2013	2020	2030
Total of losses in the power system, including technical and non-technical losses, in both transmission and distribution (% of power available: generation + balance of imports and exports).	24.9	19.9	10.0

Targets for Energy Efficiency in Buildings

	2013	2020	2030
Percentage of buildings that implement energy efficient building designs and methods	n.a.	n.a.	n.a.
Percentage of energy savings in the building sector (%)	n.a.	5%	15%

Targets for Energy Efficiency in Industries

	2013	2020	2030
Percentage of Industries that implement energy efficiency measures (%)	n.a.	n.a.	n.a.
Percentage of energy savings in industry (%)	n.a.	5%	15%

Targets for Improved Cookstoves*

	2013	2020	2030
Improved cookstoves (measured in terms of the % of the population/households with access to improved cookstoves)	37.9	100	100
Percentage of energy savings in industry (%)	n.a.	n.a.	n.a.

*In order to present a holistic picture of the domestic cooking energy sector, the estimated trajectory for the development of actual use of improved cookstoves is analysed along with other cooking energy fuels and technologies in sub-section 4.3.1 of the NREAP.

CHALLENGES

The major challenges include:

- *The statistic act 2005 is old and need to be updated to reflect current developments*
- *Regarding energy statistic lack of legal framework to mandate energy data generating institutions to collect and provide data*
- *Difficulties and Unwillingness of data key institutions to supply energy related information*

- *Inadequate funding to conduct survey in order to established baseline for some key energy datasets*

- *An institutional framework for the energy services characterised by fundamental weaknesses to capture energy related data;*

- *Very little or no available data on energy efficiency and on biomass*

END

THANK YOU

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