

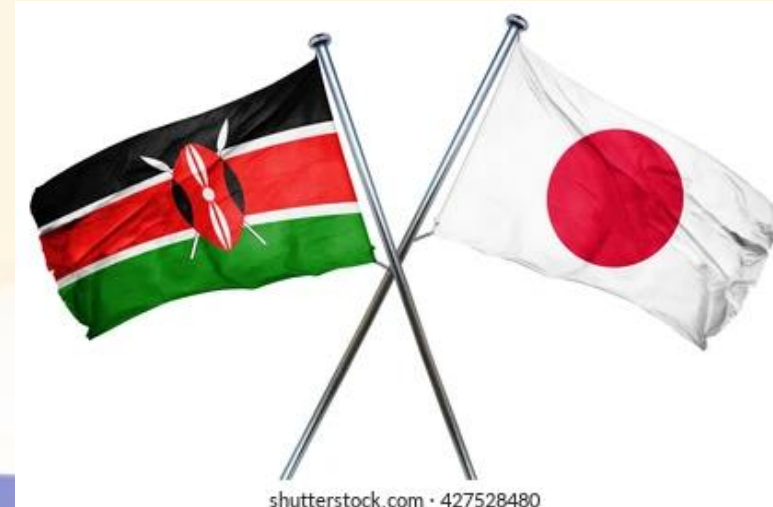


# **KENYA COUNTRY REPORT**

## **JICA KNOWLEDGE CO-CREATION PROGRAM**

### **ENERGY POLICY TRAINING**

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**EPRA**



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# PRESENTATION OUTLINE

## 1. GENERAL INFORMATION

- a) Country profile
- b) Economic indicators
- c) Energy sector organizational structure

## 2. PAST TEN YEARS ENERGY DEMAND AND SUPPLY

- a) Primary energy and supply (unit :ktoe) by source (production imports & exports)
- b) Primary energy supply (unit :ktoe )by source (coal, oil,gas,electricity, biofuels, waste and others)
- c) Final energy consumption (unit :ktoe) by sector( industry, transport, others)
- d) Final energy consumption(unit :ktoe) by energy source (coal, oil, gas, electricity,biofuels,waste and others)
- e) Electricity generation(unit:GWh) by energy source(coal,gas,nuclear,renewable sources)
- f) CO2 emission (unit:MT CO2) by sector (industry, transport and others)

## 3. OUTLOOK OF ENERGY DEMAND AND SUPPLY

- a) Outlook of peak demand upto 2043
- b) Outlook of electricity generation upto 2043

## 4. CURRENT ENERGY POLICY AND MEASURES

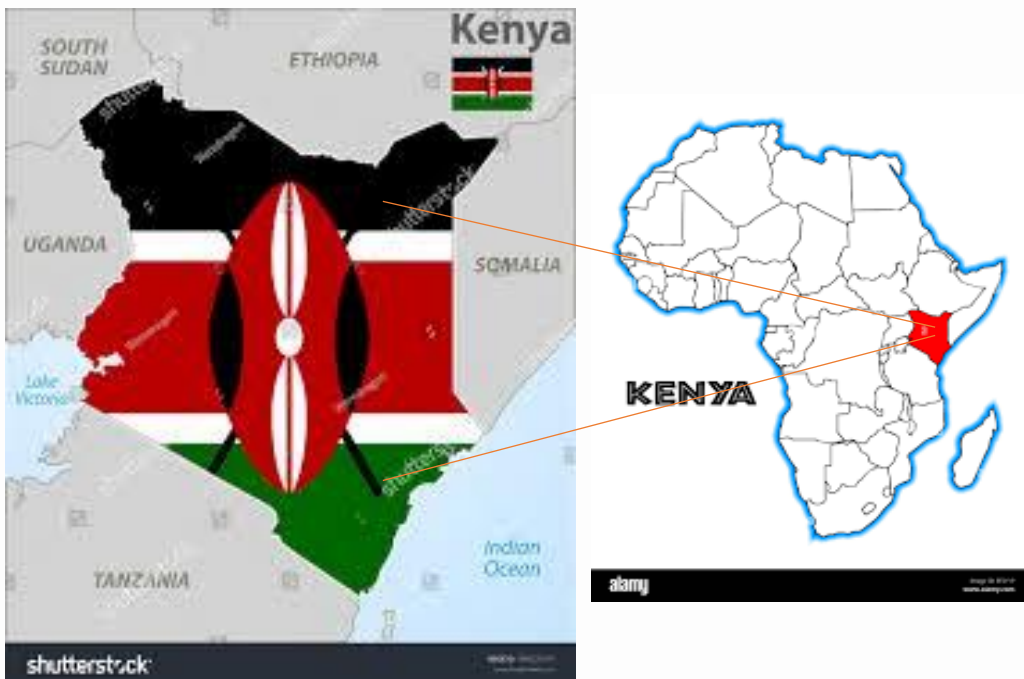
- a) Major difficulties and bottlenecks in formulating energy policies

## 5. EXPECTED SUBJECTS TO BE LEARNT IN THE PROGRAM

6. Weighted average cost of generation per technology

7. Energy related investments for domestic and overseas

# GENERAL COUNTRY OVERVIEW



|                      |                                                                                    |
|----------------------|------------------------------------------------------------------------------------|
| Territory            | 582,646 Sq. Kilometers                                                             |
| Capital              | Nairobi                                                                            |
| Official languages   | Kiswahili and English                                                              |
| Currency             | Kenya shilling (KES)                                                               |
| Exchange rate        | USD/KES: 130 as at June 2025                                                       |
| System of Government | Multi-party democracy with two levels of government(National & County governments) |

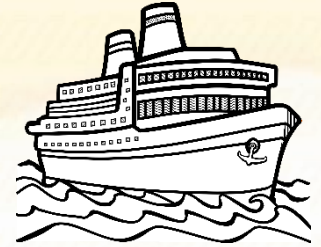
# Economic indicators



Population  
52,428,290



Nominal GDP  
KSh16.24Trillion(US\$125.7 Billion)



BOP  
KSh-0.14Trillion  
(US\$ -1.08 Billion)



Households  
13,886,126



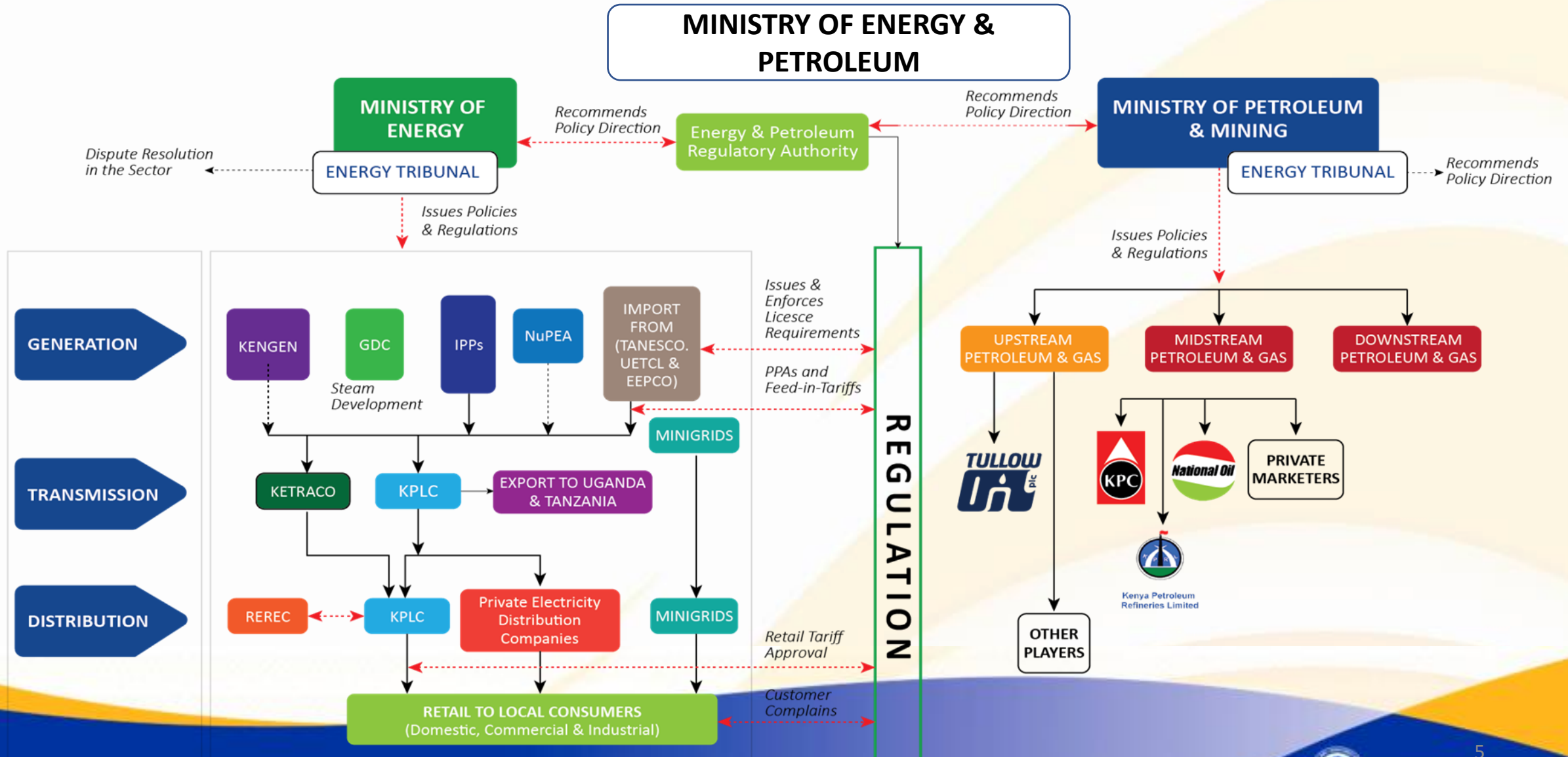
Inflation  
4.1%



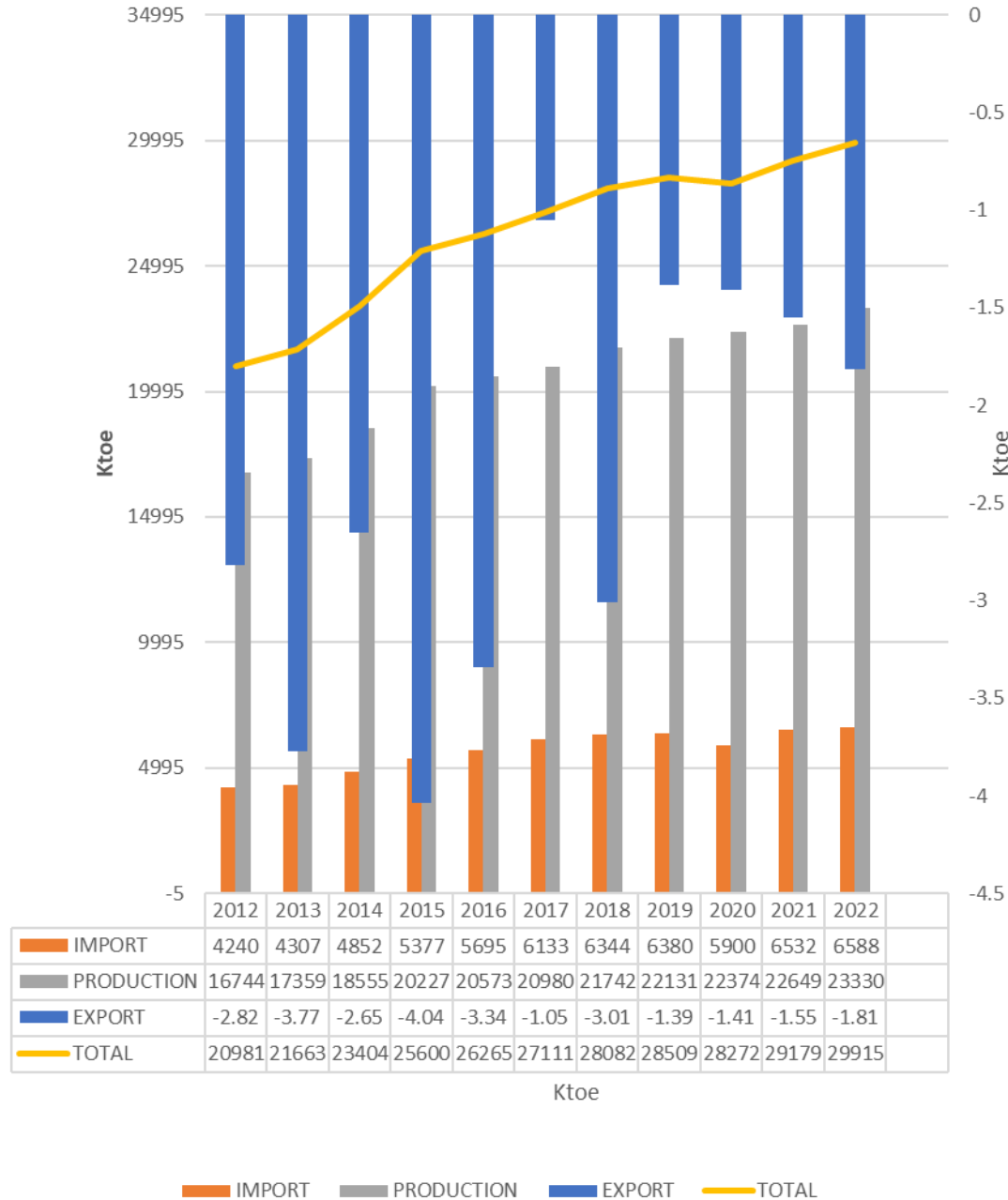
Electricity access rate  
76% of households

Data source: Economic Survey 2024

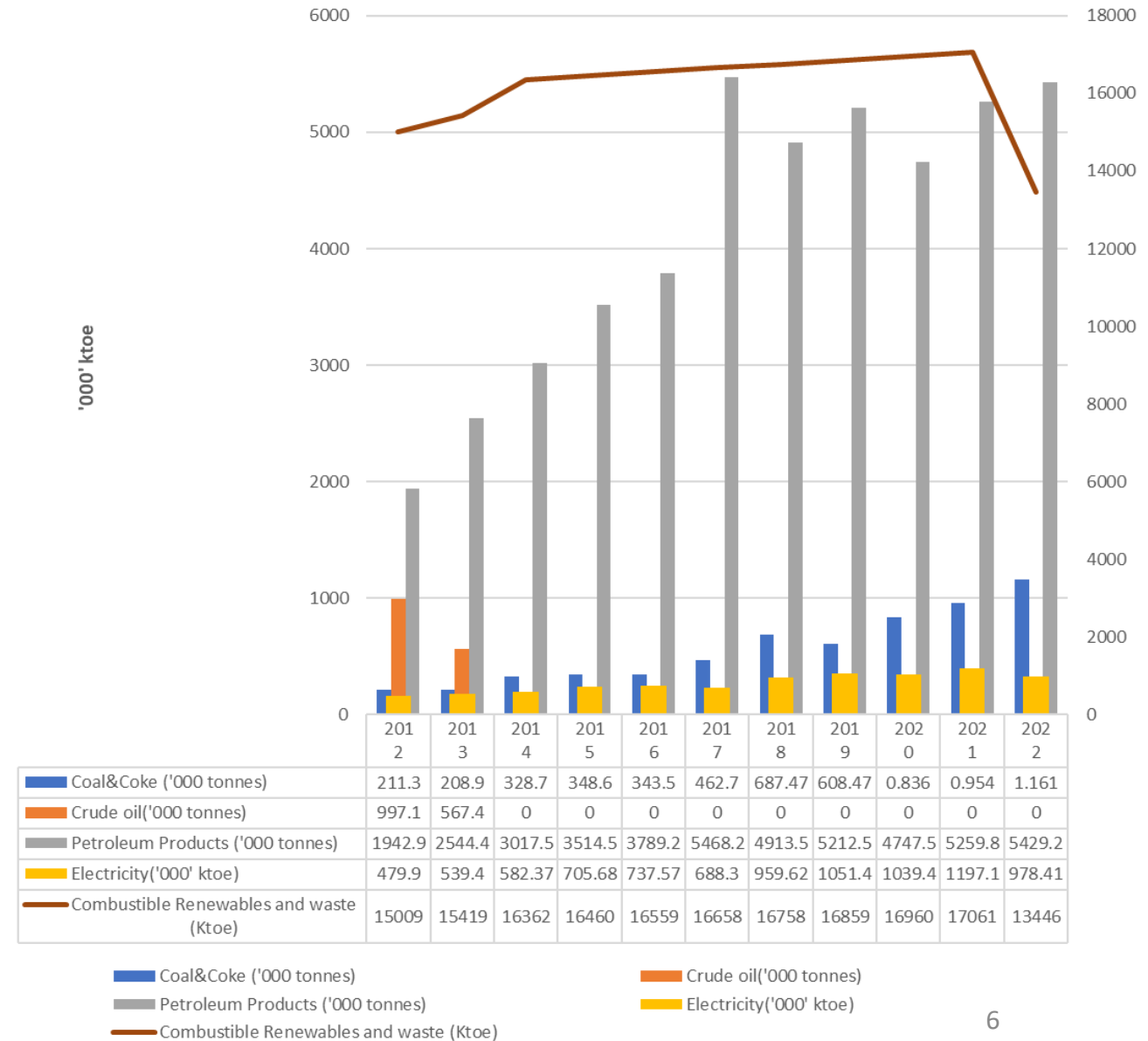
# Energy sector organizational structure



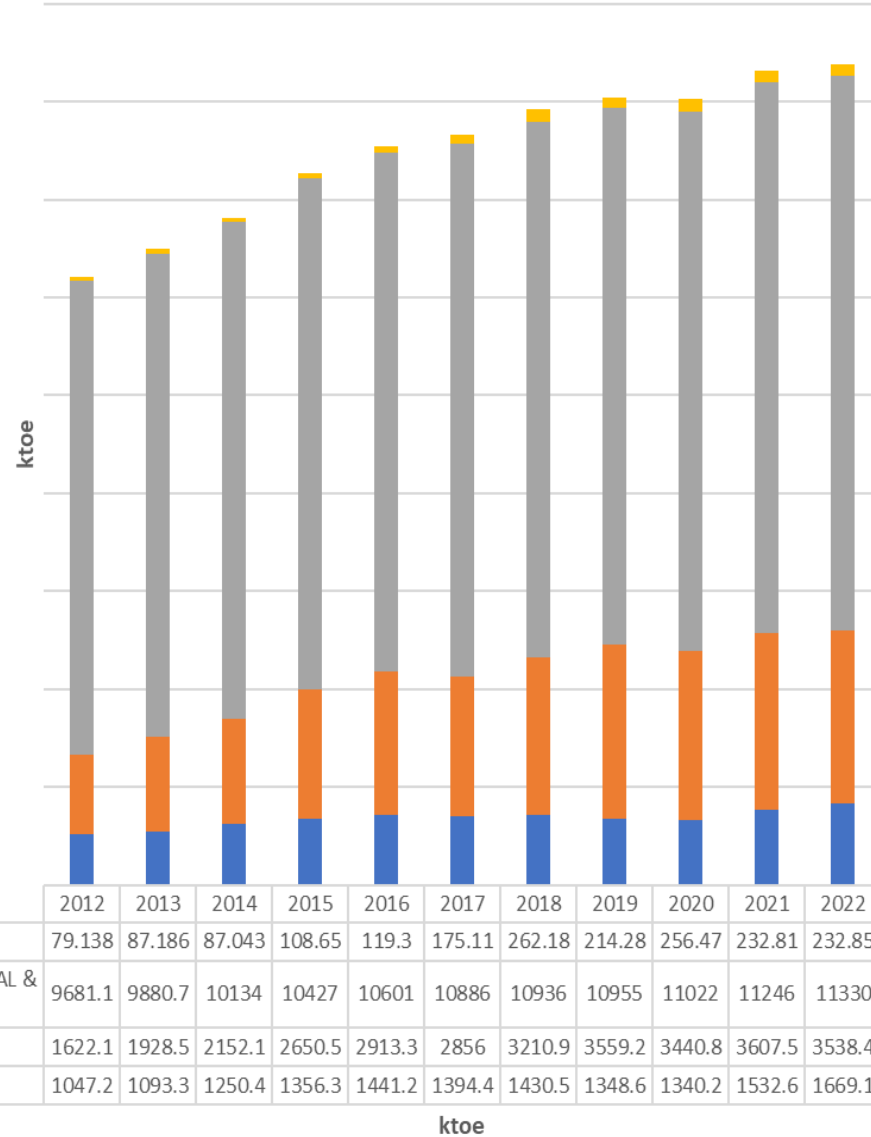
# Primary Energy Supply by Source



# Primary Energy Supply by energy source

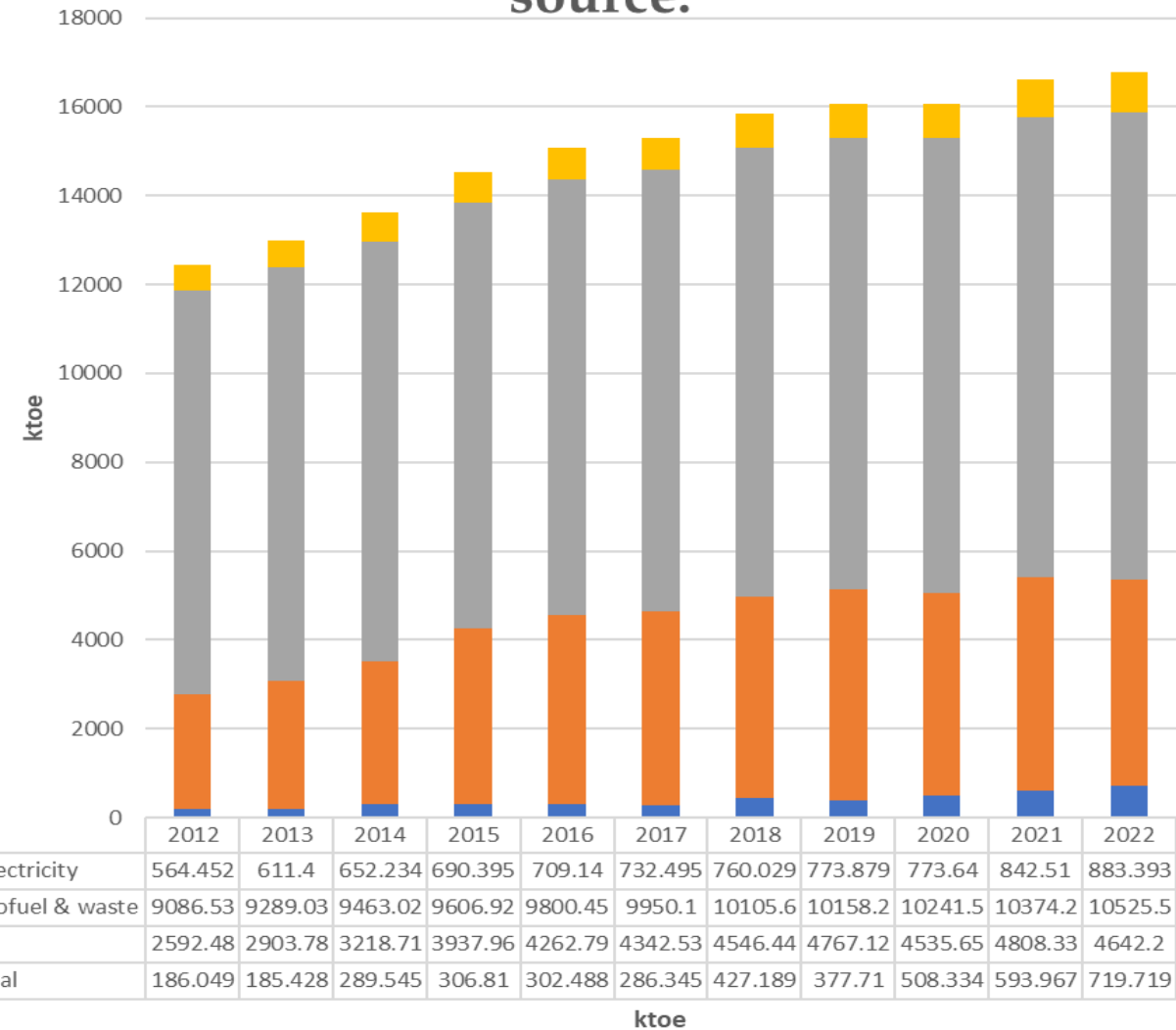


# Final Energy Consumption by Sector



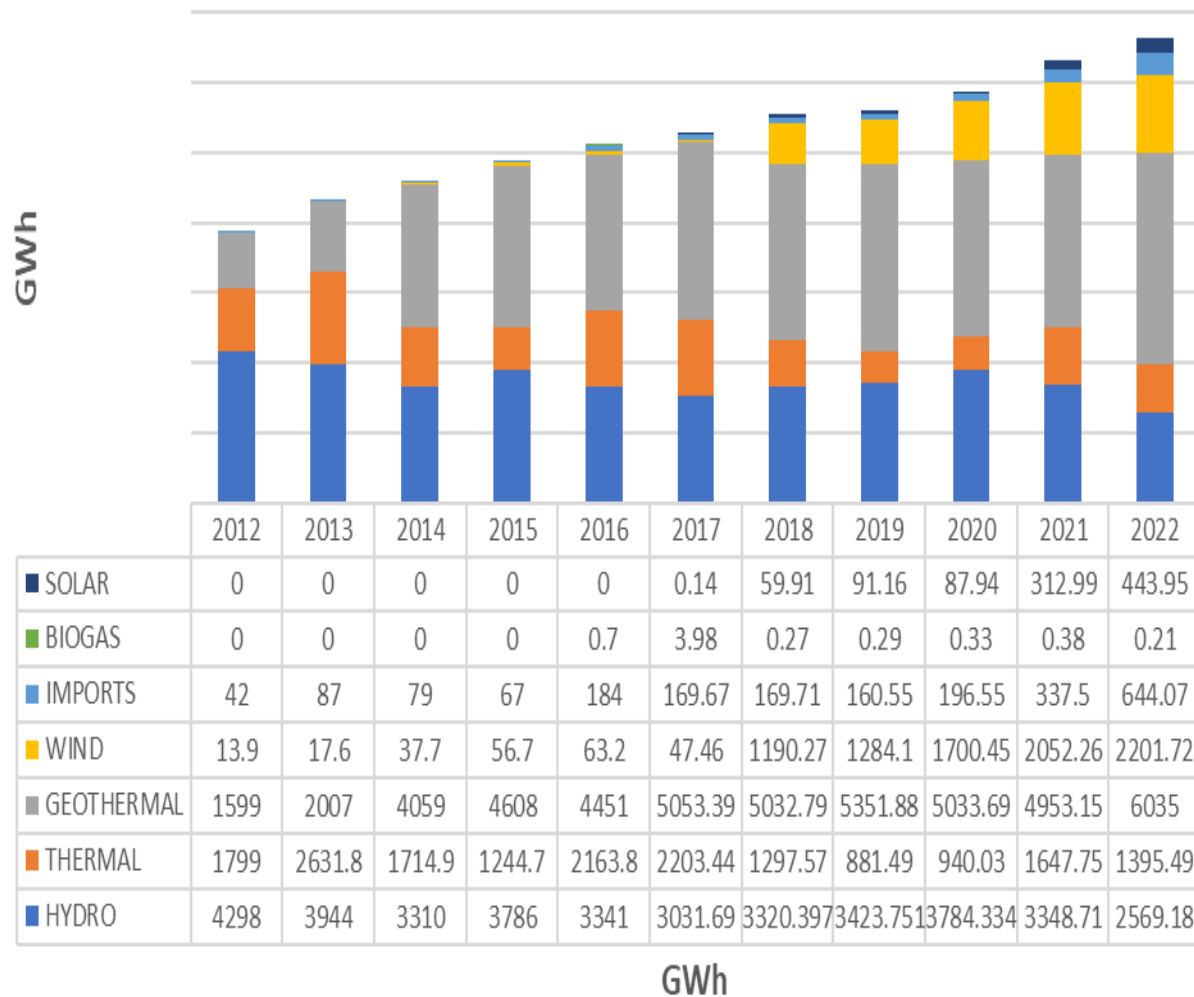
■ INDUSTRY (ktoe) ■ TRANSPORT ■ RESIDENTIAL, COMMERCIAL & PUBLIC SERVICES ■ OTHERS

# Final energy consumption by energy source.



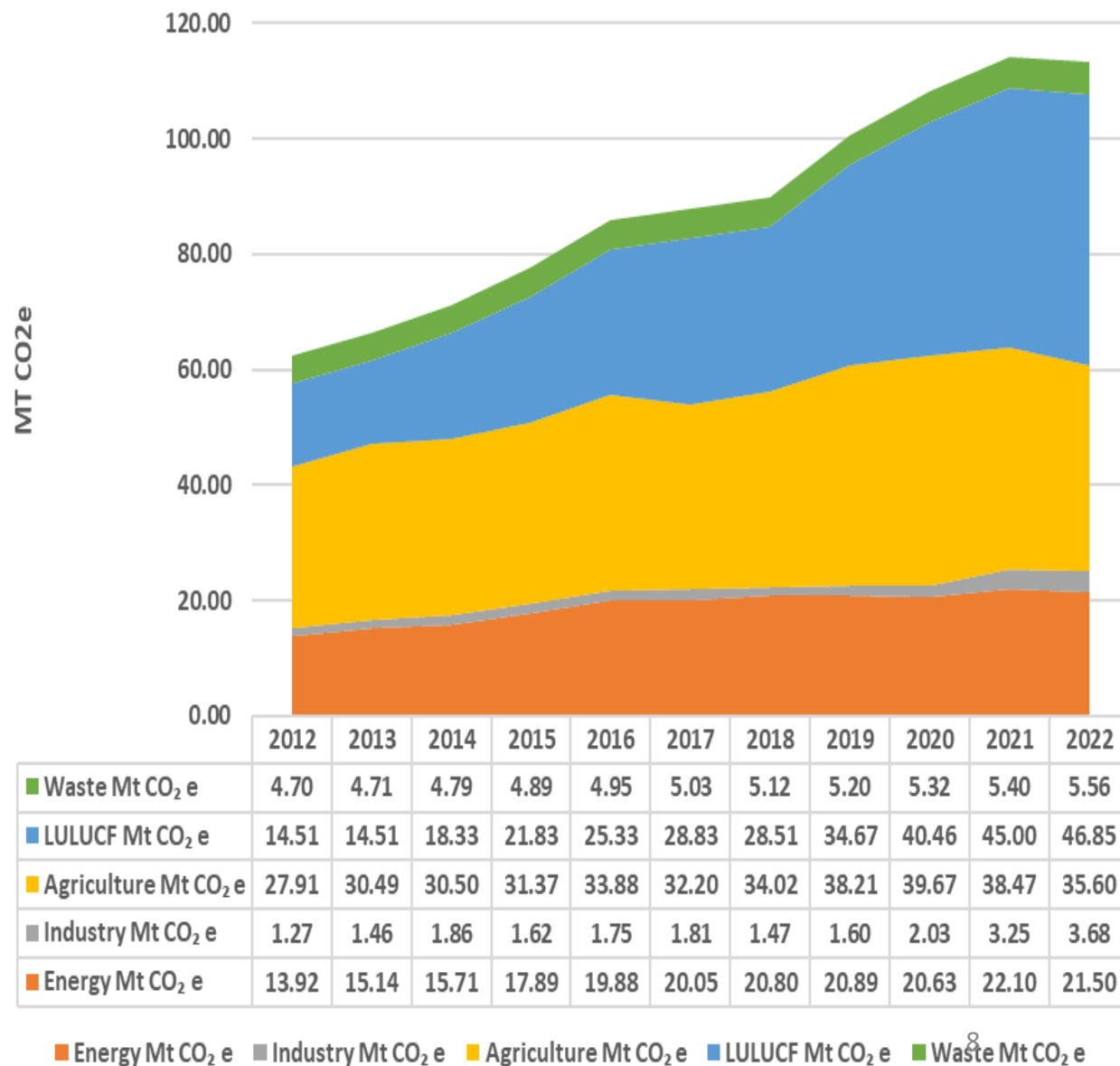
■ coal ■ oil ■ biofuel & waste ■ electricity

# ELECTRICITY GENERATION BY ENERGY SOURCE



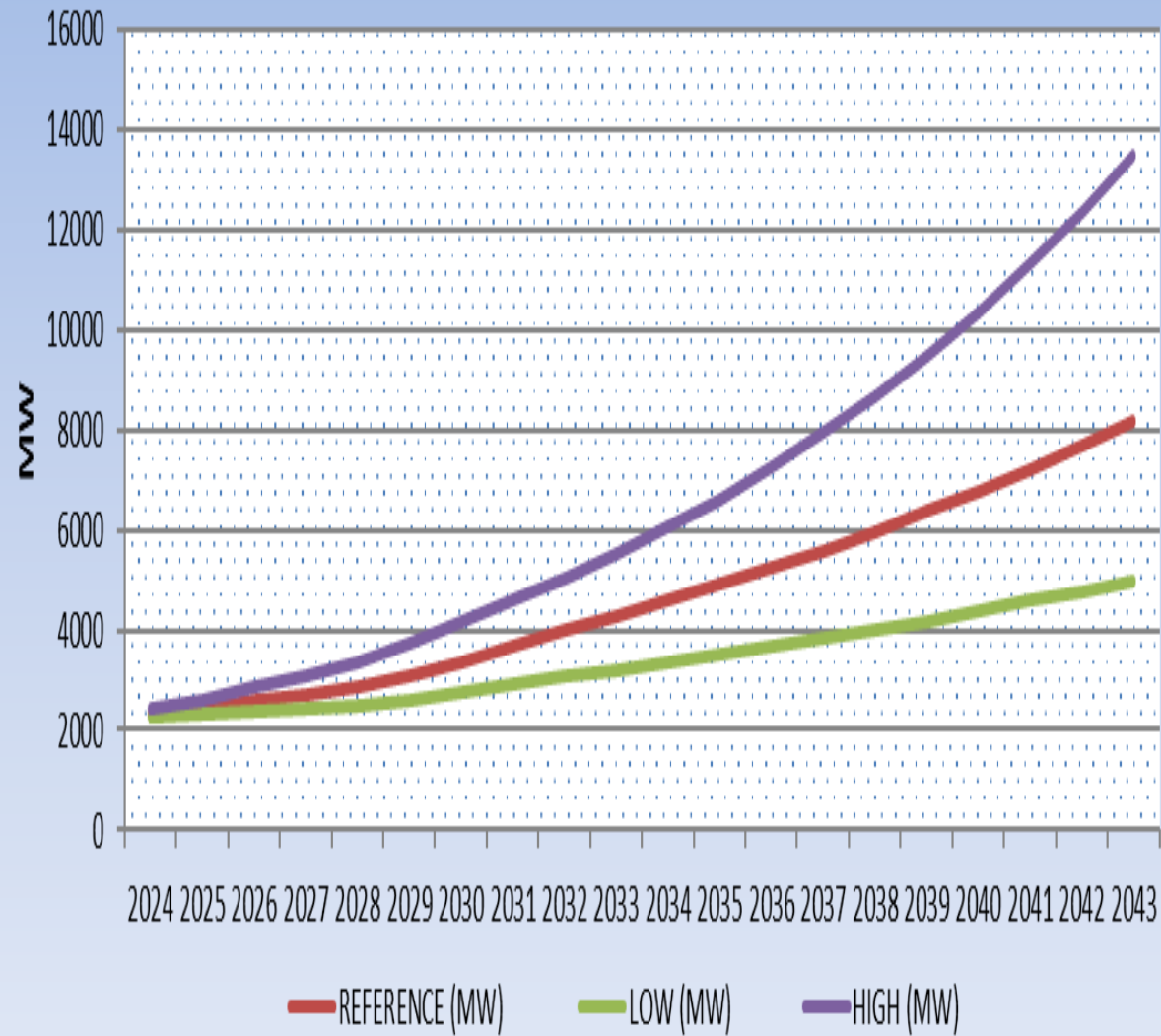
■ HYDRO ■ THERMAL ■ GEOTHERMAL ■ WIND ■ IMPORTS ■ BIOGAS ■ SOLAR

# CO2 emissions by sector

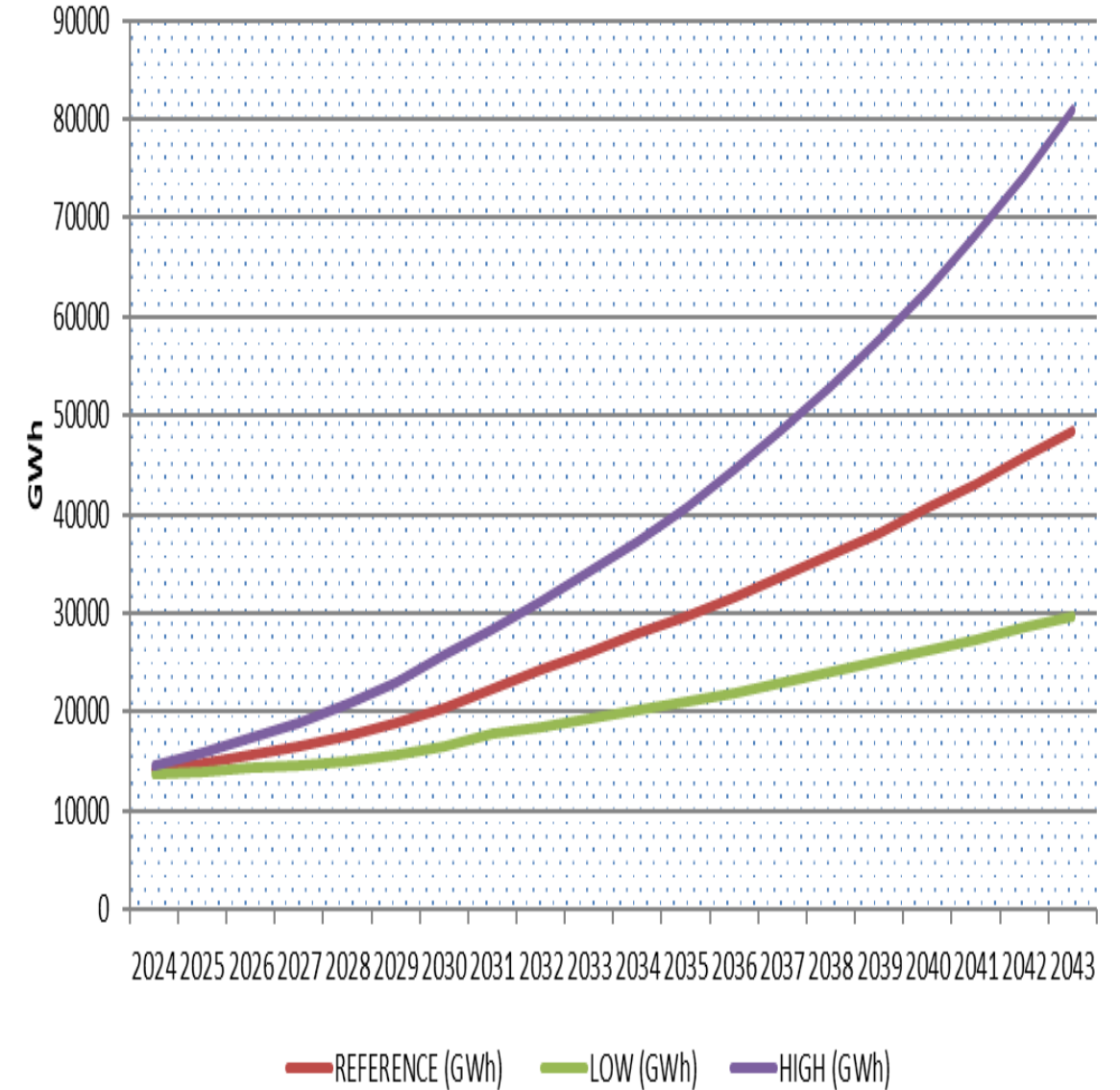


■ Energy Mt CO<sub>2</sub> e ■ Industry Mt CO<sub>2</sub> e ■ Agriculture Mt CO<sub>2</sub> e ■ LULUCF Mt CO<sub>2</sub> e ■ Waste Mt CO<sub>2</sub> e

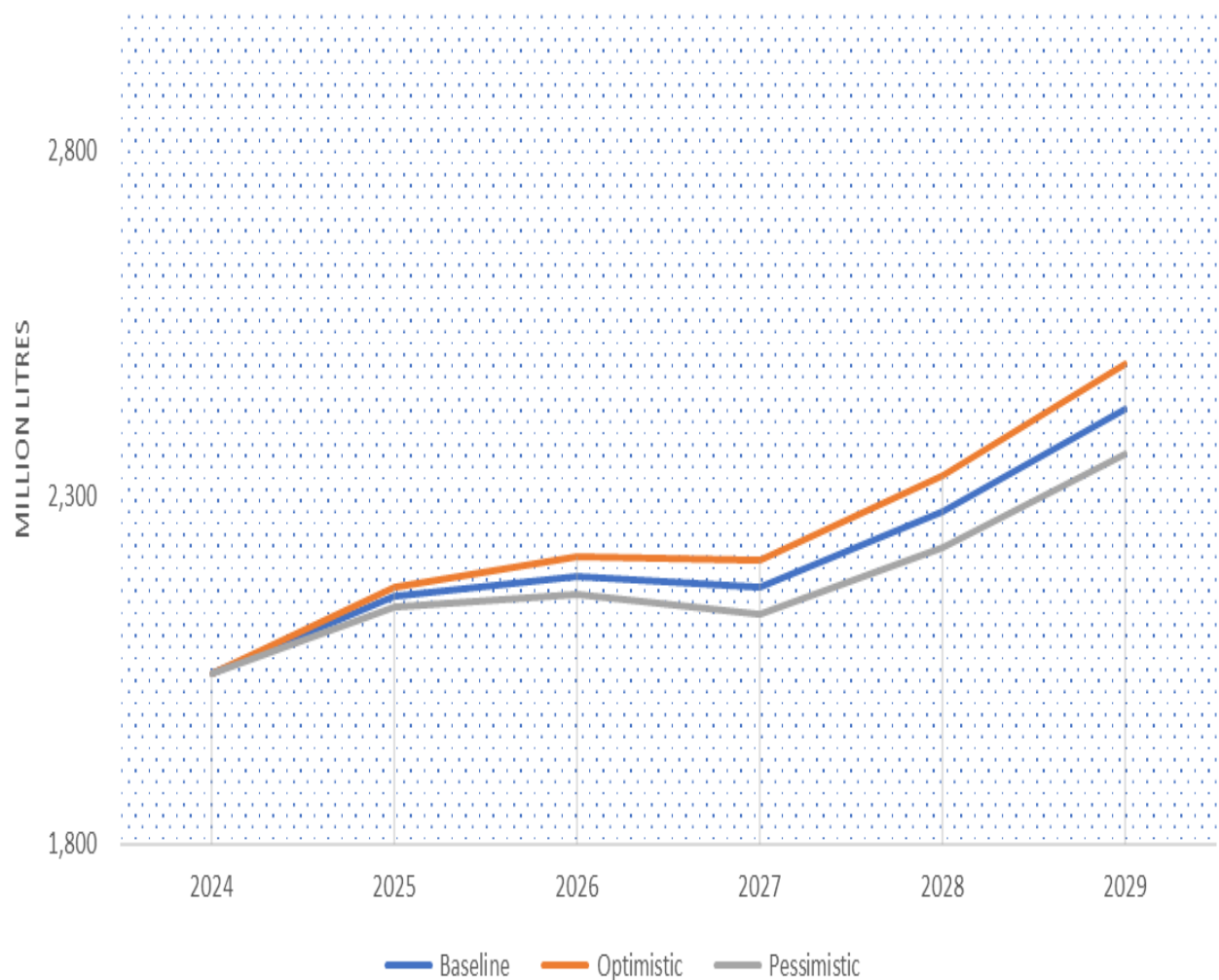
## PEAK DEMAND OUTLOOK



## ELECTRICITY GENERATION OUTLOOK



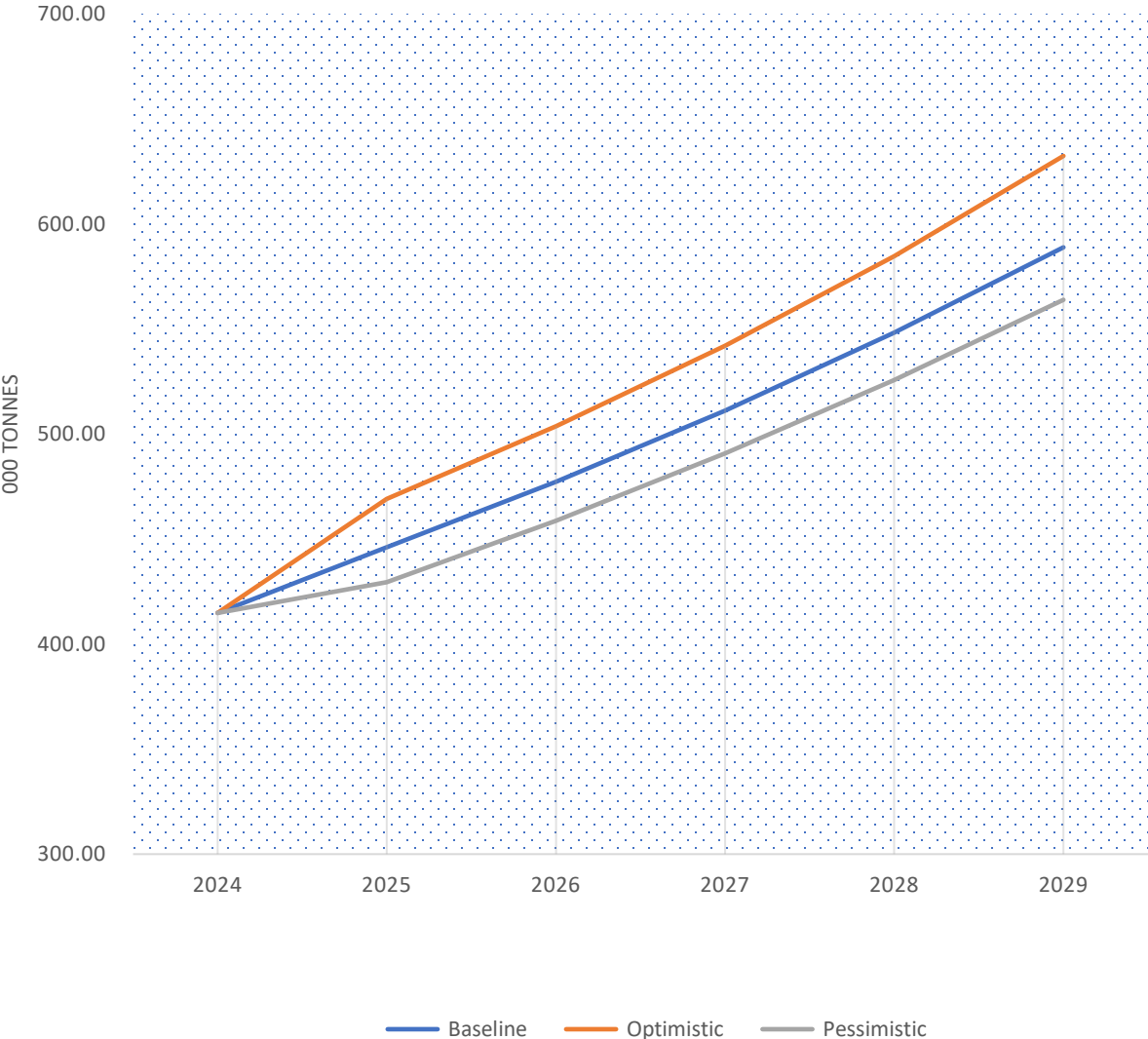
Petrol demand (million litres)



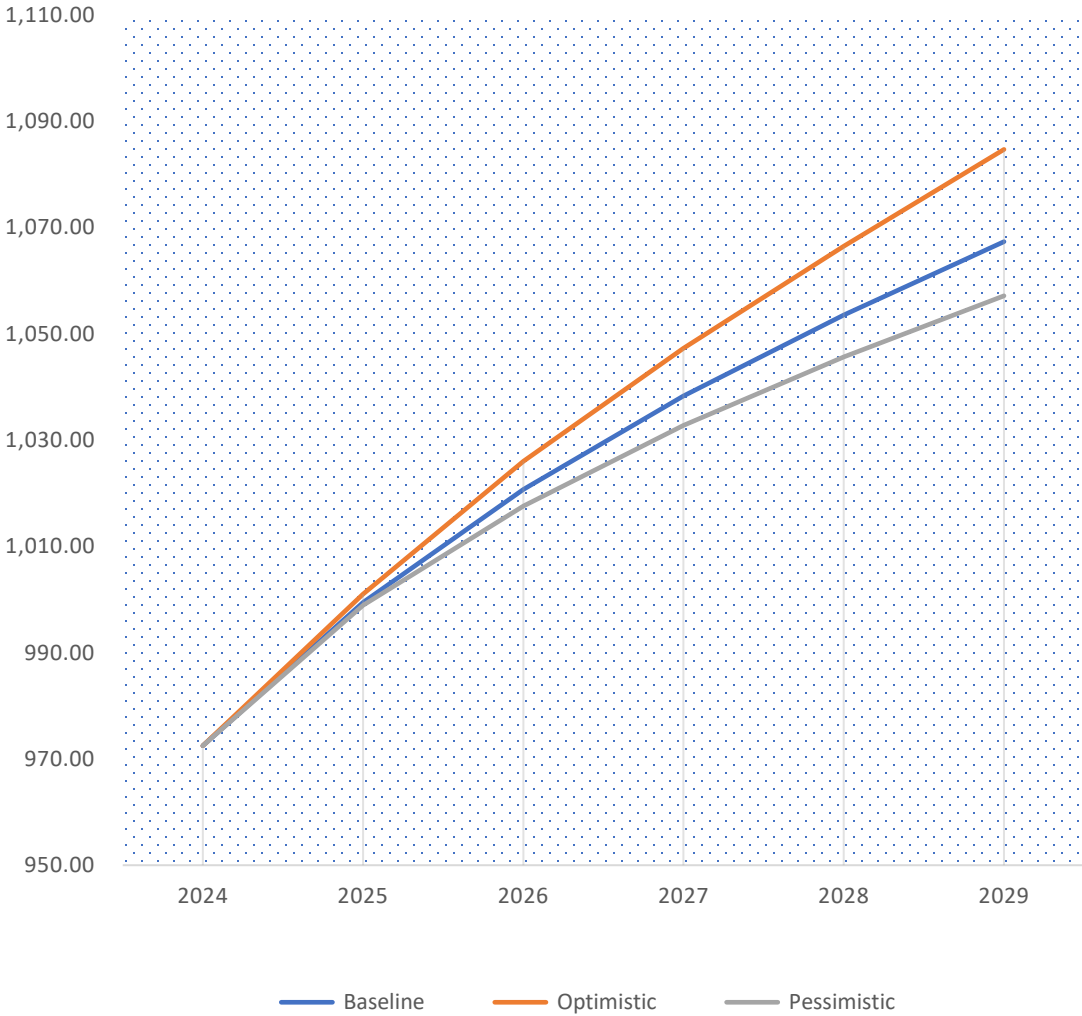
Diesel demand (million litres)



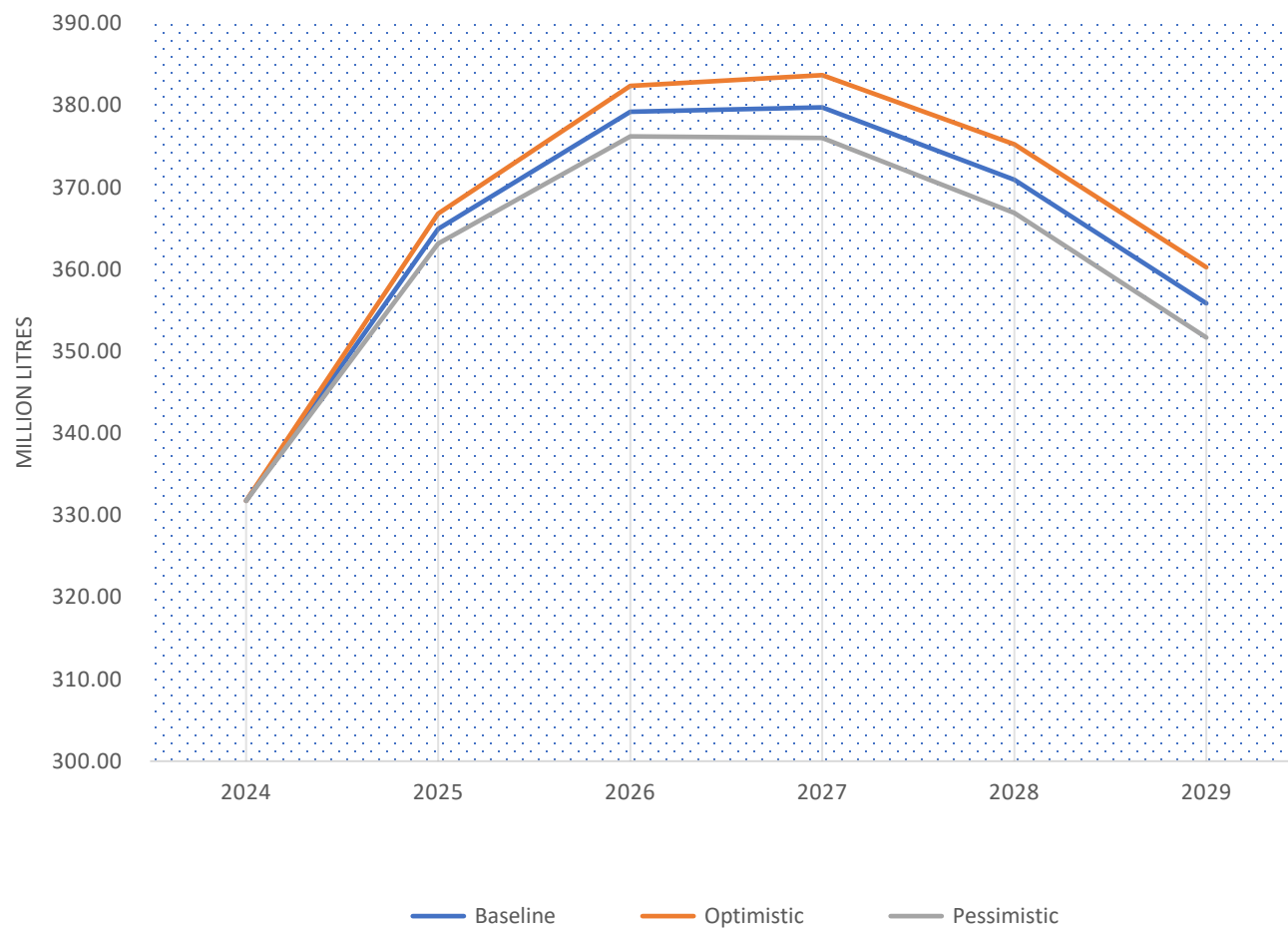
LPG Demand (Tonnes)



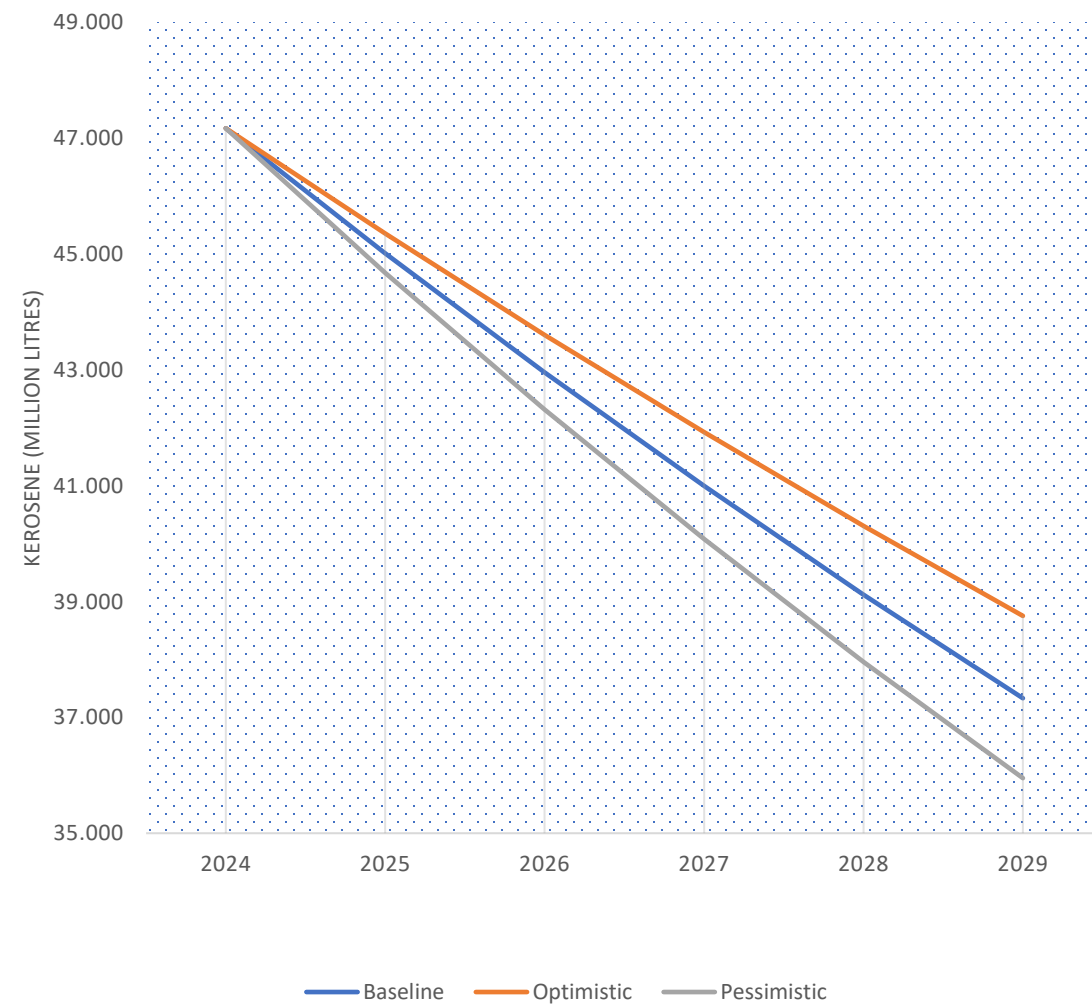
Jet Fuel Demand (Million Litres)



Fueloil demand (Million litres)



Kerosene Demand in Million Litres



# CURRENT ENERGY POLICIES AND MEASURES

## ➤ Energy policies

- ❑ The Energy act 2019

- ❑ The energy policy (sessional paper No. 4 2004)

- ❑ The draft energy policy 2025

- ❑ The draft renewable energy auction policy.

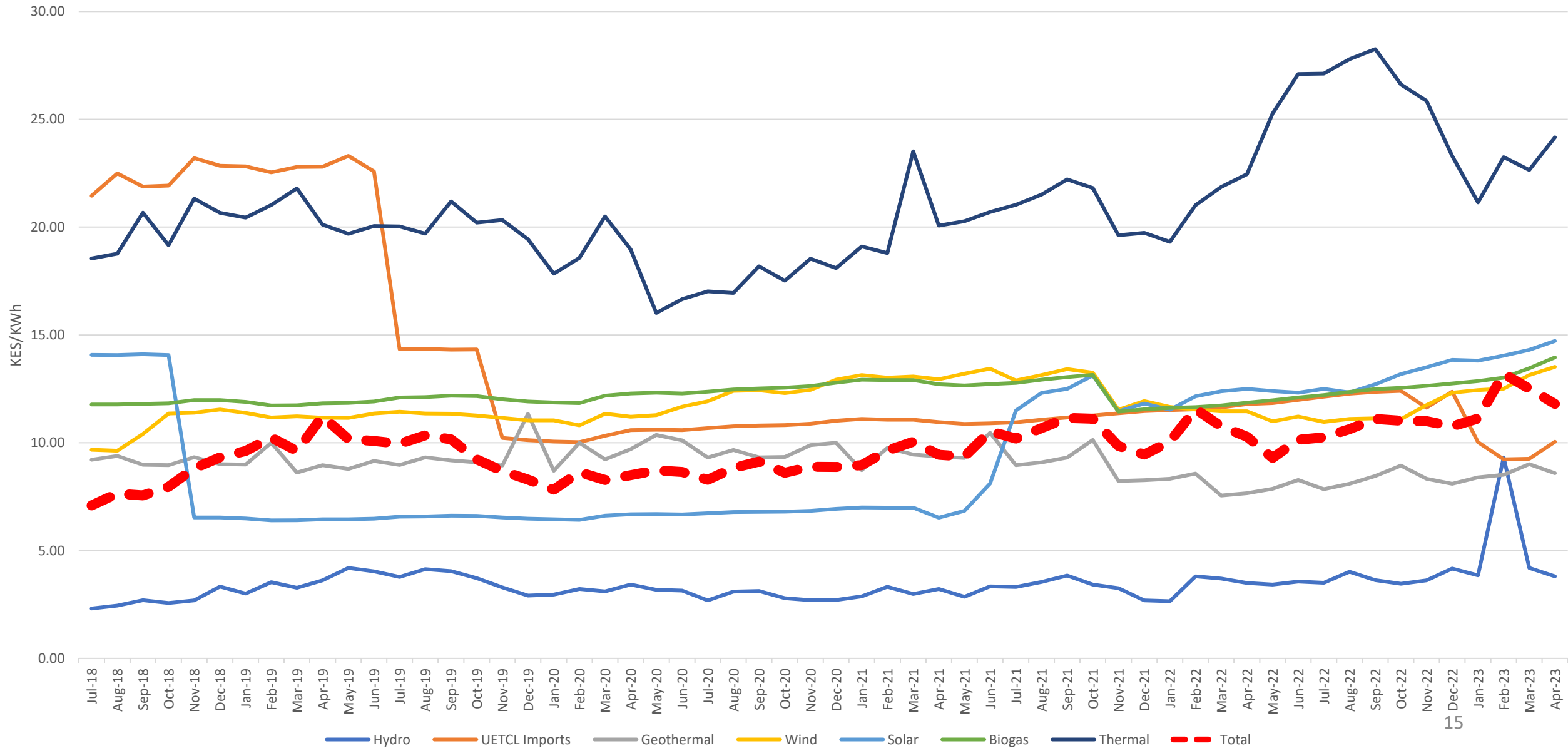
## ➤ Bottlenecks in formulating energy policies in Kenya;

- Lack of centralized data hub to inform evidence-based policy formulation.
- Disjointed data
- Lack of Capacity

# EXPECTED SUBJECT TO BE LEARNT

- ❖ Strategies for transitioning to a power market
- ❖ Energy forecast
- ❖ Energy supply and demand balancing
- ❖ Energy and power economics

## WEIGHTED AVERAGE COST OF GENERATION PER TECHNOLOGY



# ENERGY- RELATED INVESTMENTS FOR DOMESTIC AND OVERSEAS

- Transmission
  - ❖ Interconnectors
    - ✓ Kenya-Ethiopia 500kVDC
    - ✓ Kenya- Tanzania 400kV
    - ✓ Kenya- Uganda 400kV

# Thank You

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