



DIRECTORATE GENERAL OF NEW, RENEWABLE ENERGY AND ENERGY CONSERVATION  
MINISTRY OF ENERGY AND MINERAL RESOURCES

# INDONESIA COUNTRY REPORT

Fazri Aditya Pramadya

*JICA Co-Creation Program for JFY 2024*

*“Energy Policy (On-site Program) [202311627J001]”*

**June 2024**



Borobudur Temple, Central Java

# Country Profile



Jakarta



Archipelago country  
38 Provinces

## Economic



GDP

1.32 trillion USD  
(2022)



GDP per  
Capita

4,788 USD  
(2022)

## Demography



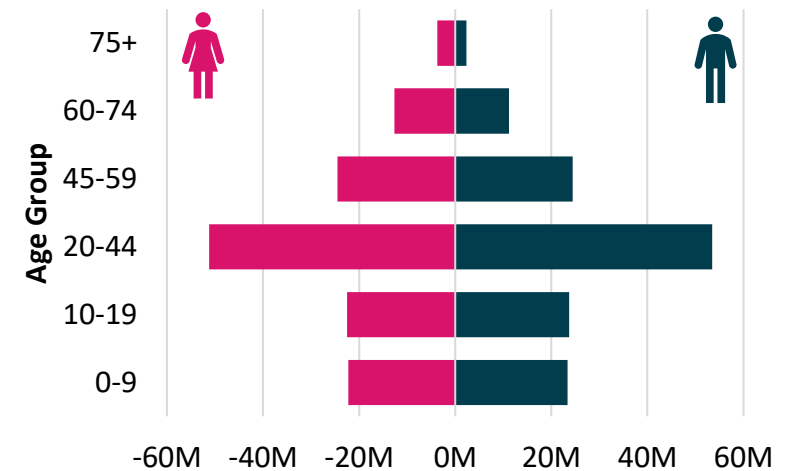
Population

277,534,122 (2022)



Households

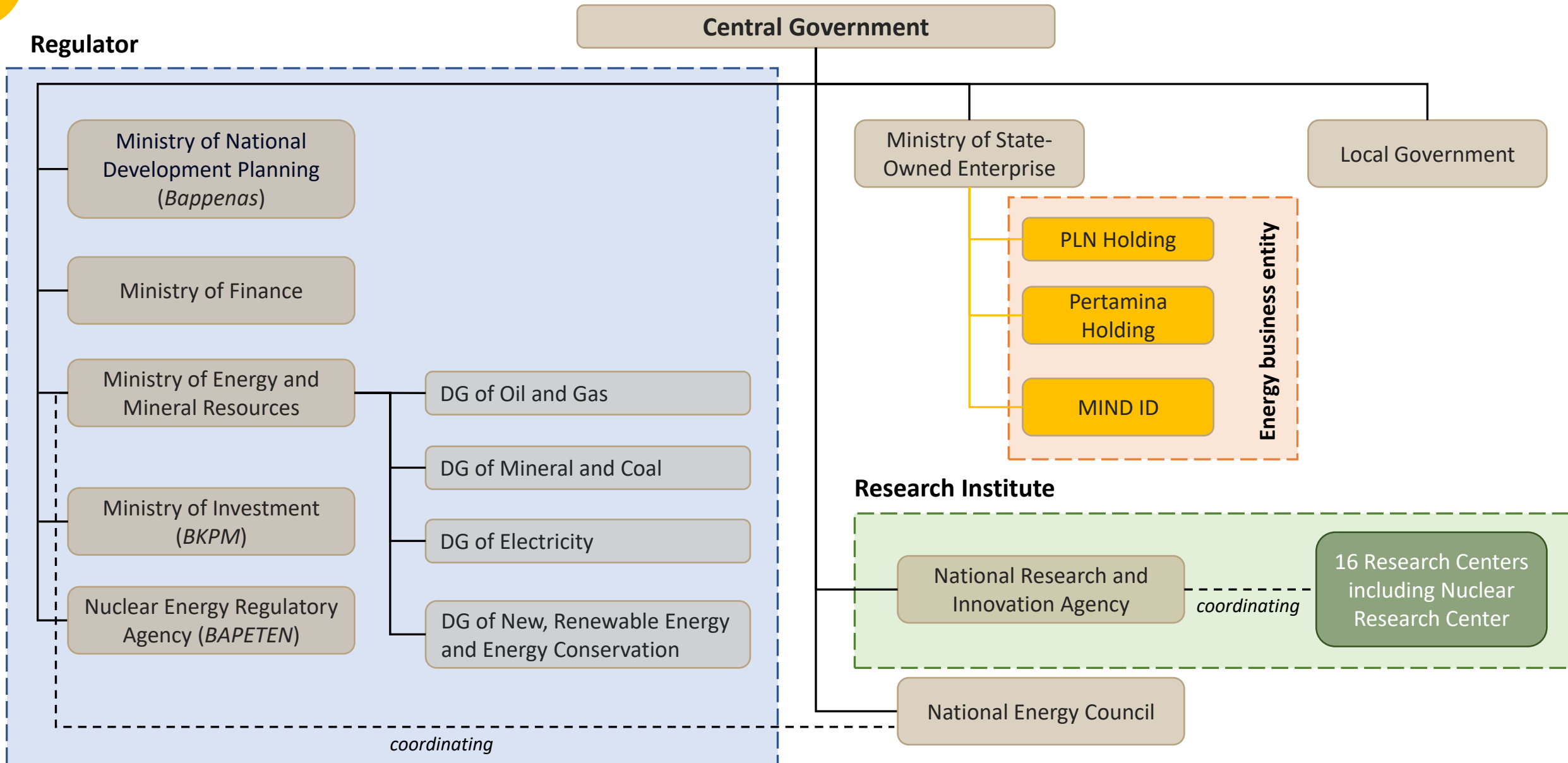
70,841,750 (2022)



Source:

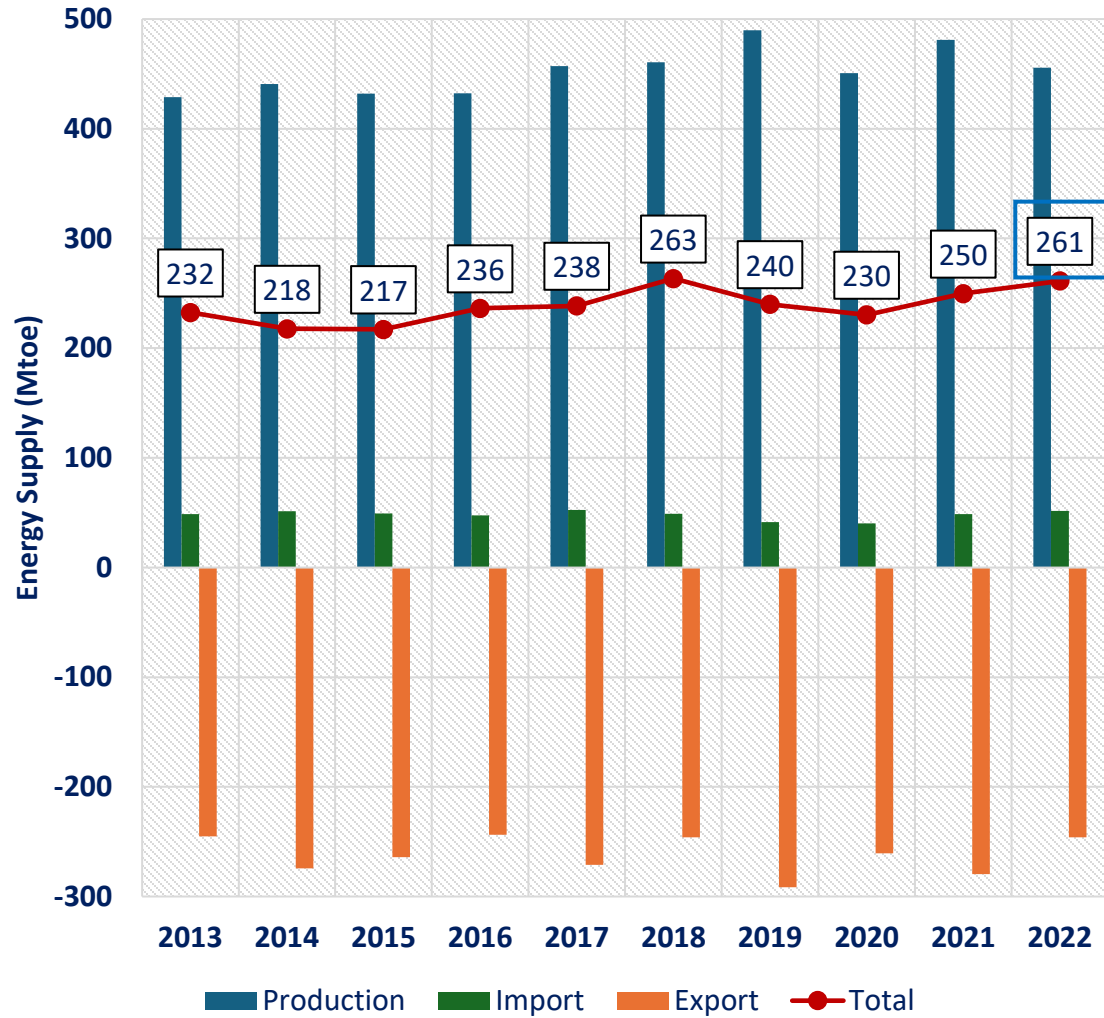
- World bank (2022)
- MEMR, Handbook of Energy & Economic Statistic of Indonesia (2022)
- <https://www.populationpyramid.net/indonesia/2023/>

# Organizational Structure Related to Energy Sector

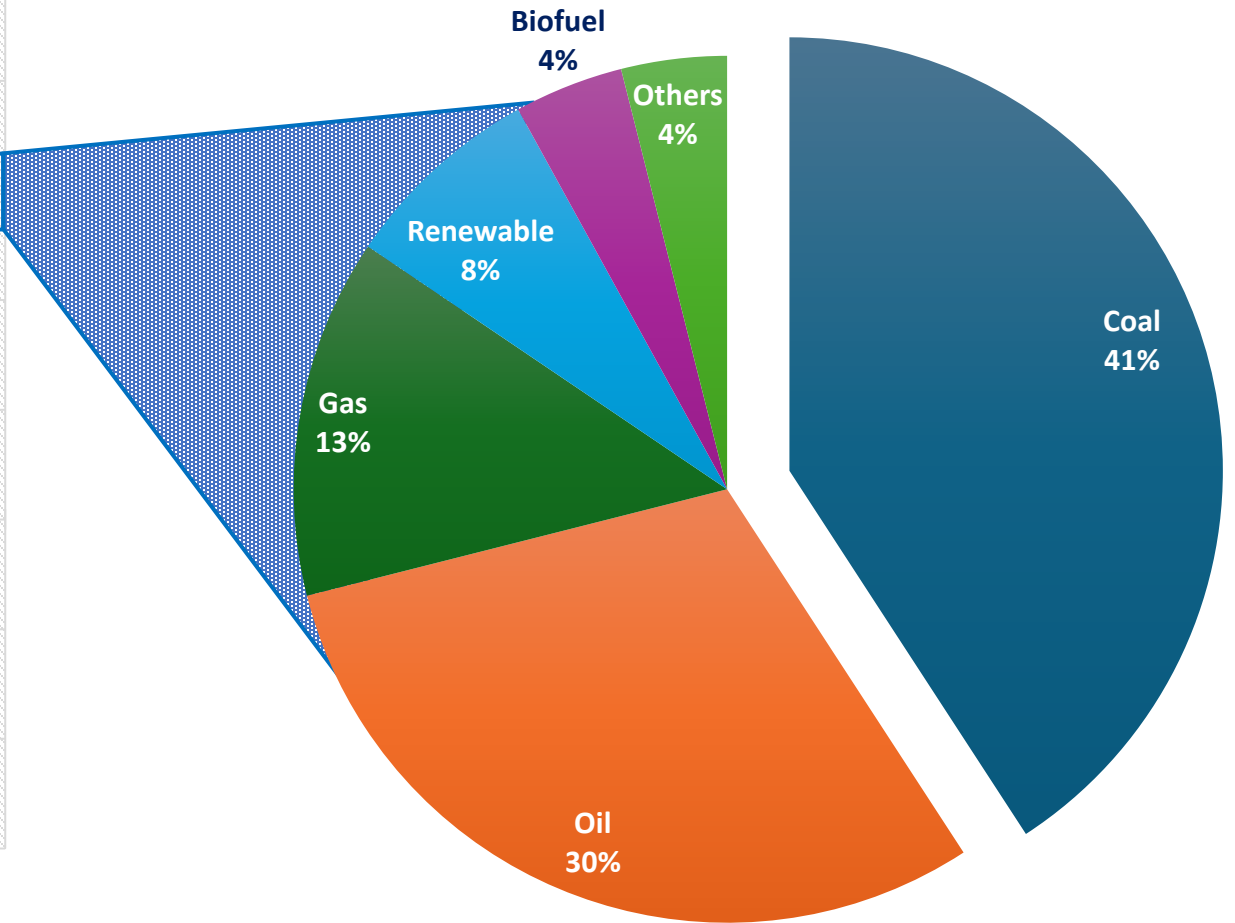


# Energy Supply

## Energy Supply by Source



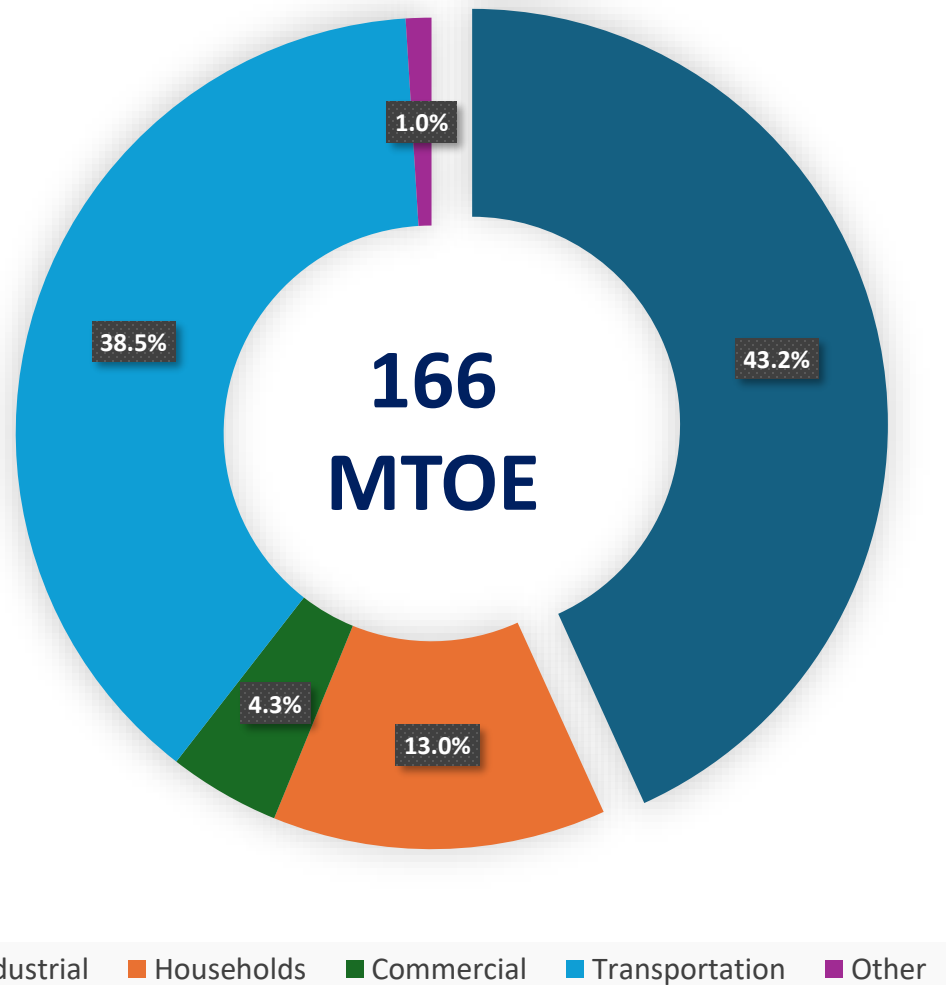
## Energy Supply by Energy Type in 2022



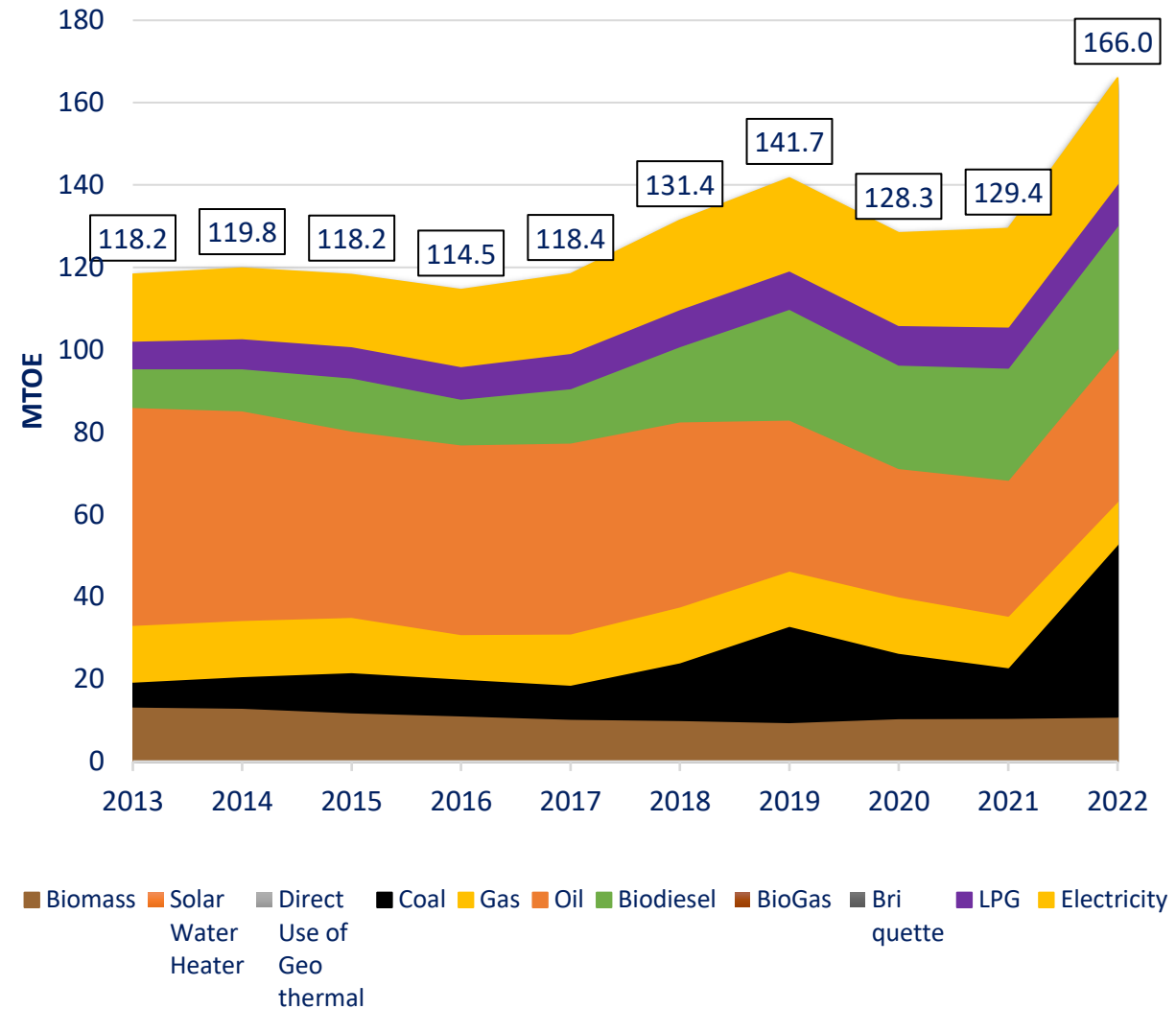
Source: MEMR, Handbook of Energy & Economic Statistic of Indonesia (2022)

# Energy Consumption

## Energy Consumption by Sector in 2022



## Energy Consumption by Type of Energy

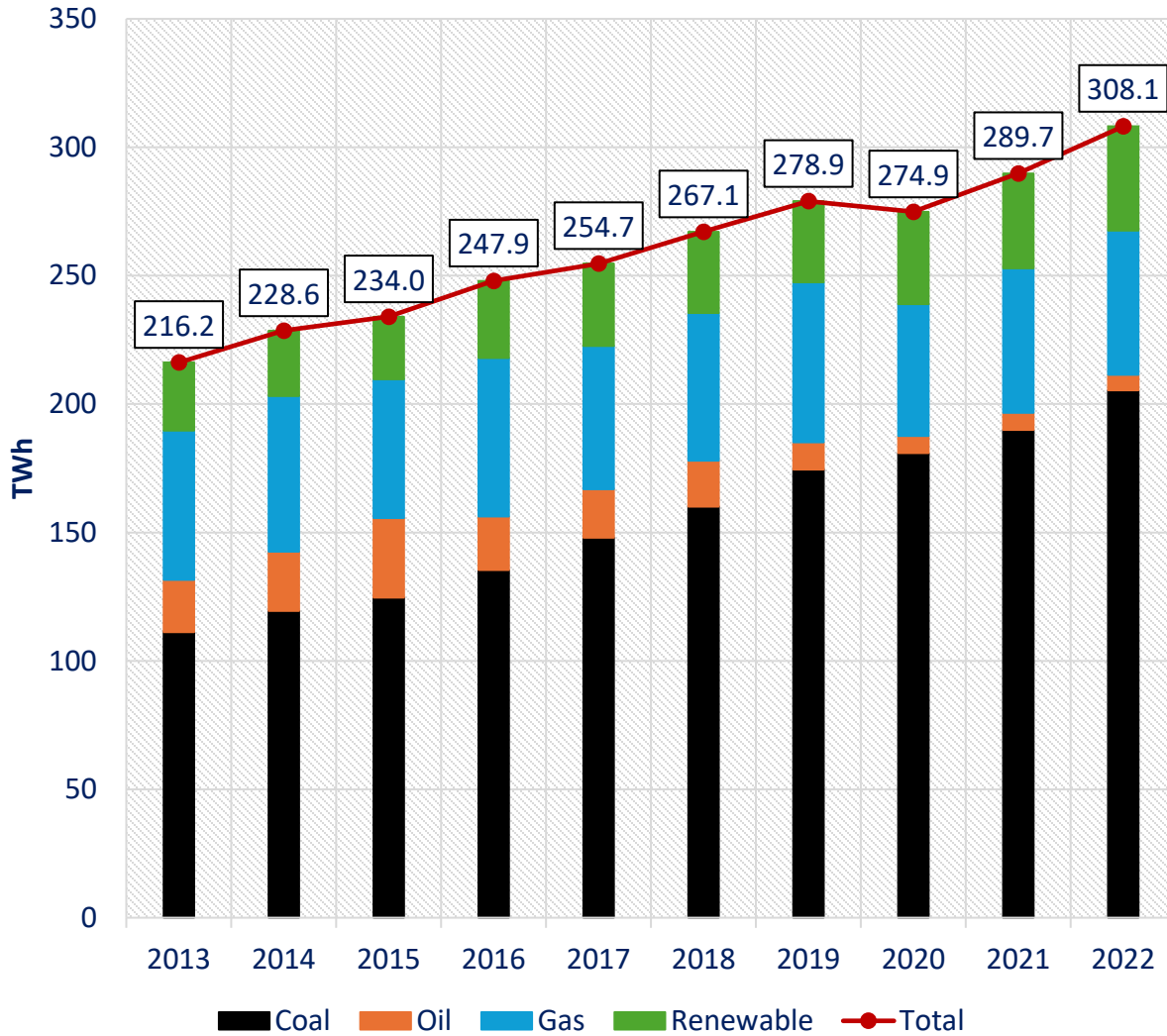


Source: MEMR, Handbook of Energy & Economic Statistic of Indonesia (2022)

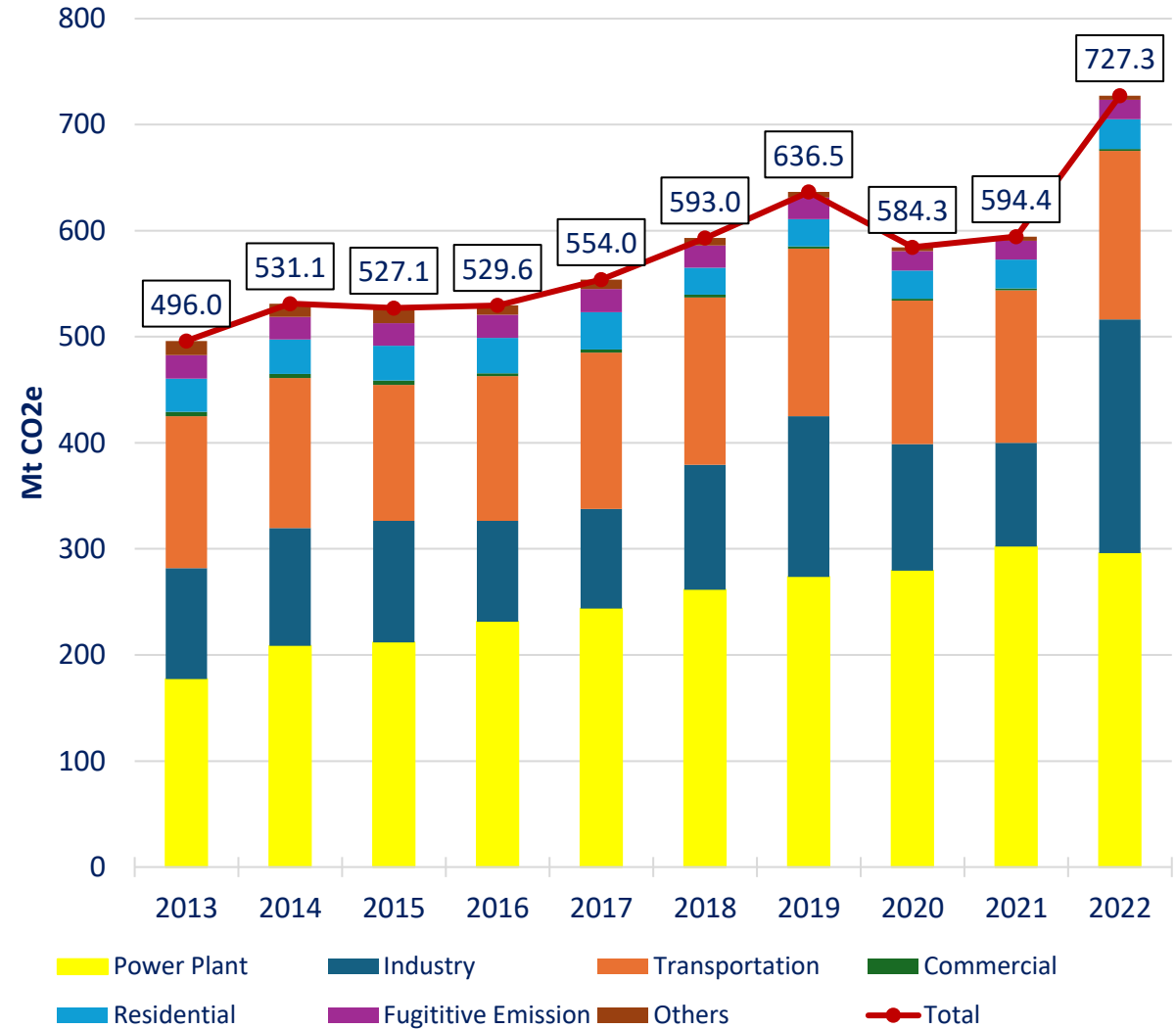


# Electricity Generation and CO2 Emission

## Electricity Generation



## GHG Emission by Sector

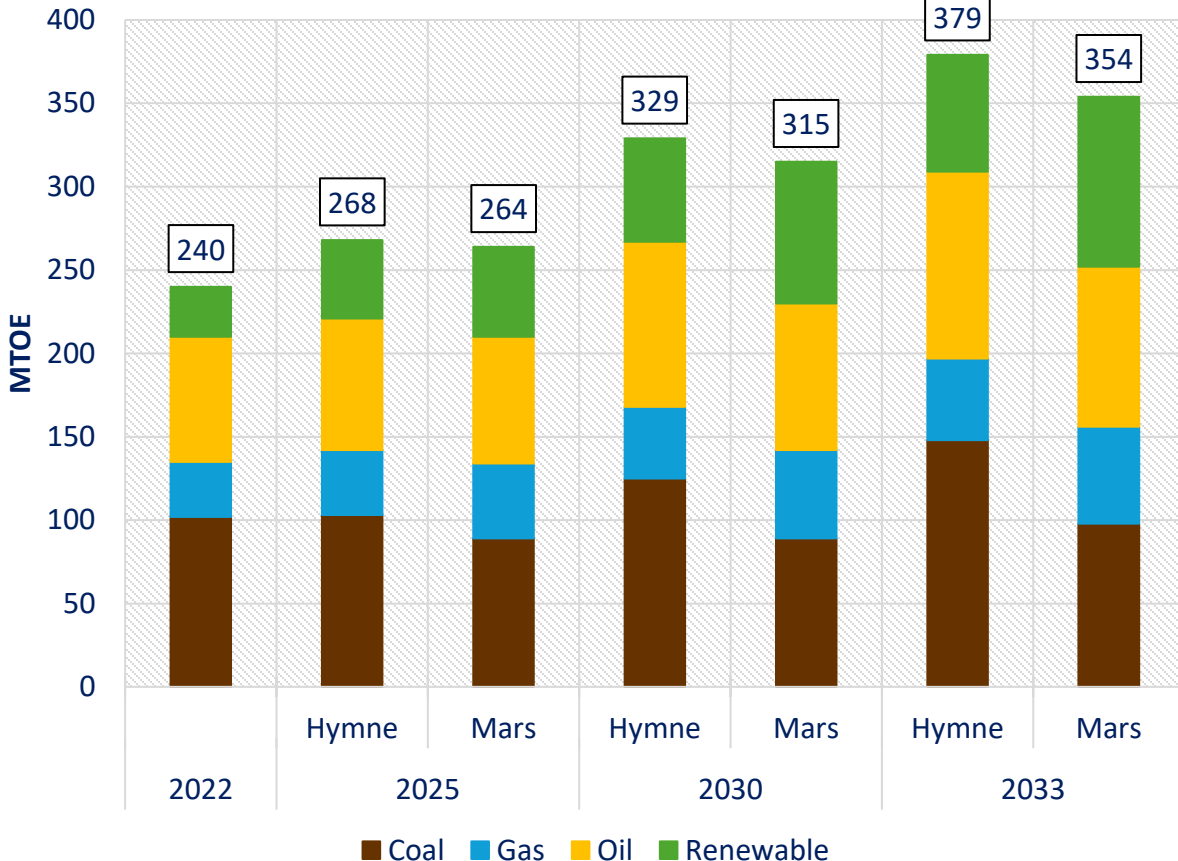


Source: MEMR, Handbook of Energy & Economic Statistic of Indonesia (2022)

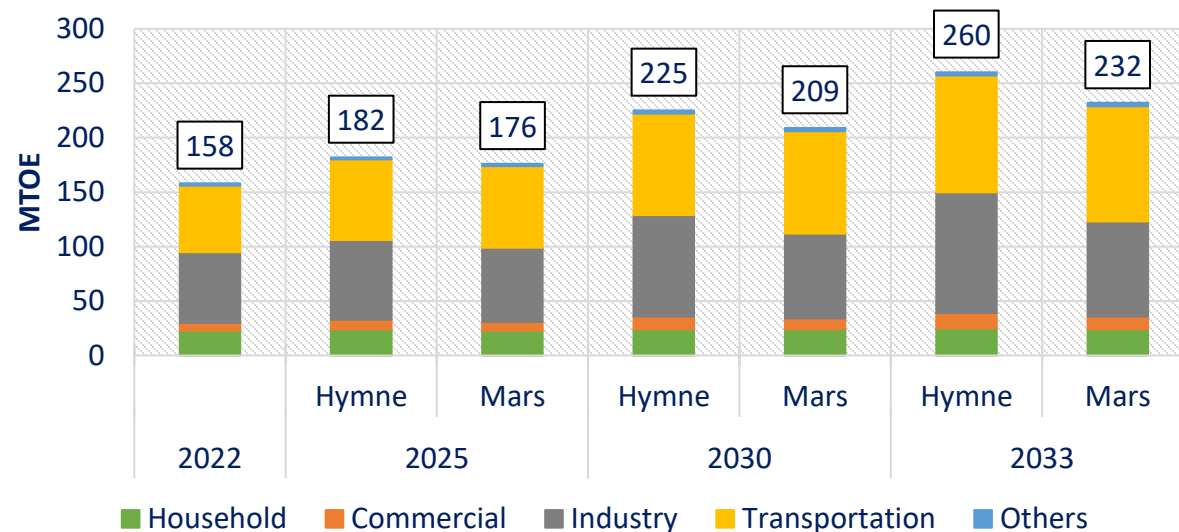
Directorate General of NREEC @2024

# Outlook of Energy Demand and Supply (1)

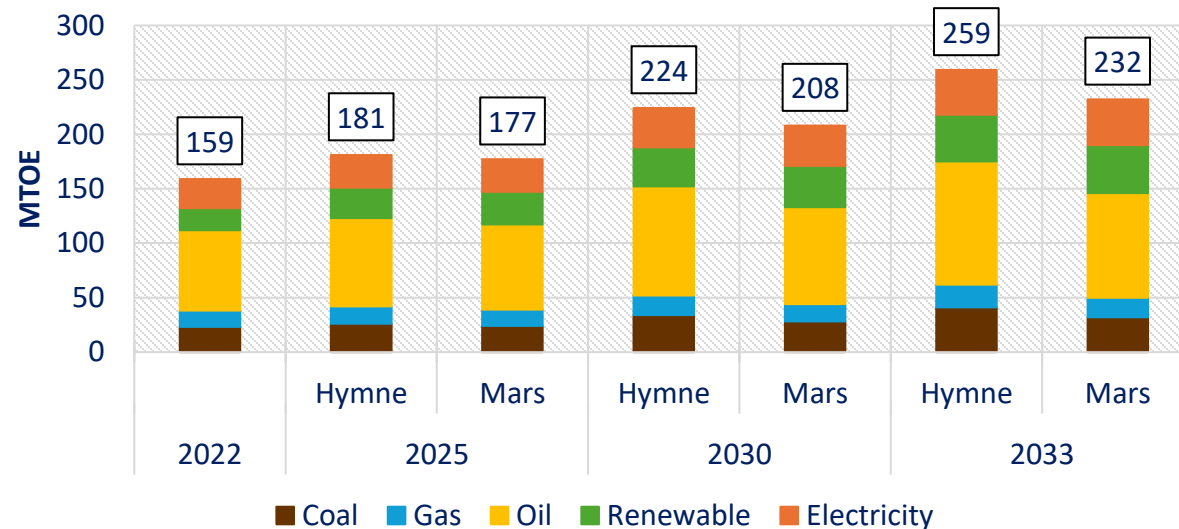
## Outlook Primary Energy Supply by Energy Source



## Outlook Energy Consumption by Sector



## Outlook Energy Consumption by Type of Energy



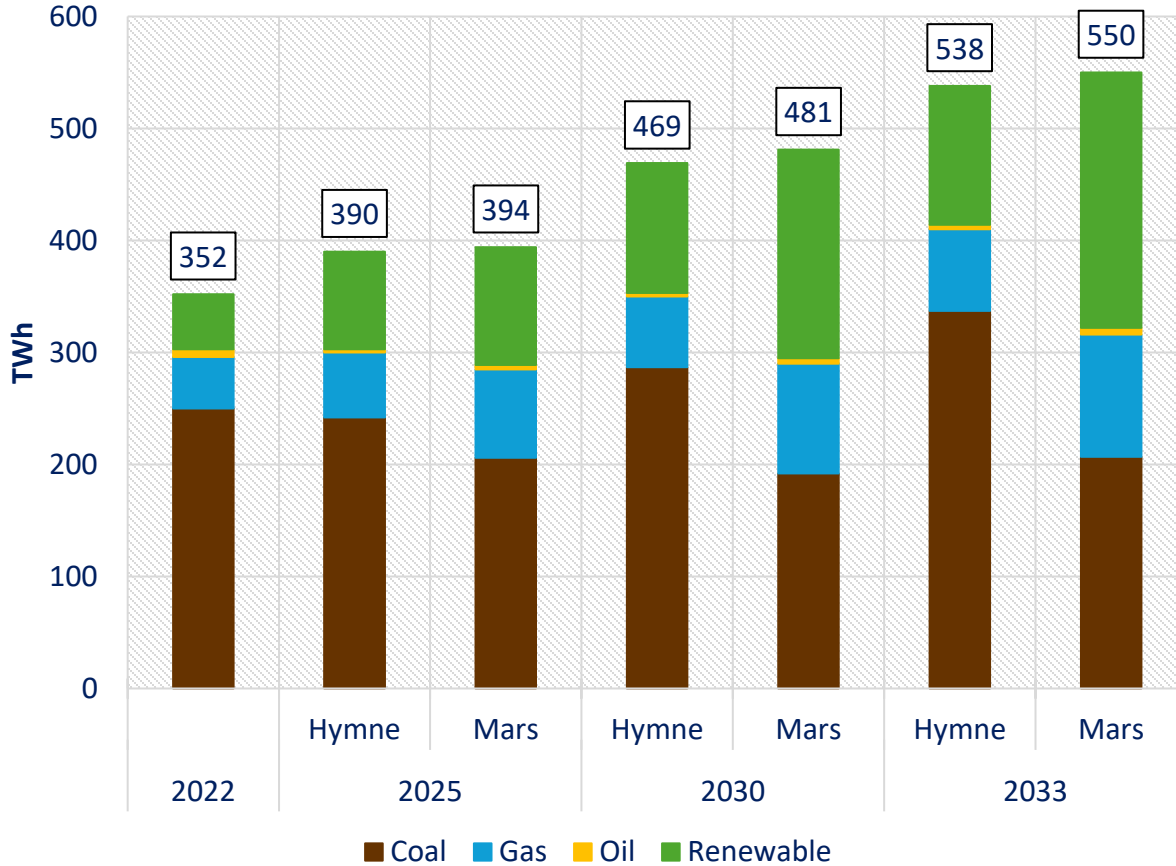
- **Hymne** scenario for business as usual; and
- **Mars** scenario that use NZE planning for the assumption of energy utilization.

Source: MEMR, Indonesia Energy Outlook (2023)

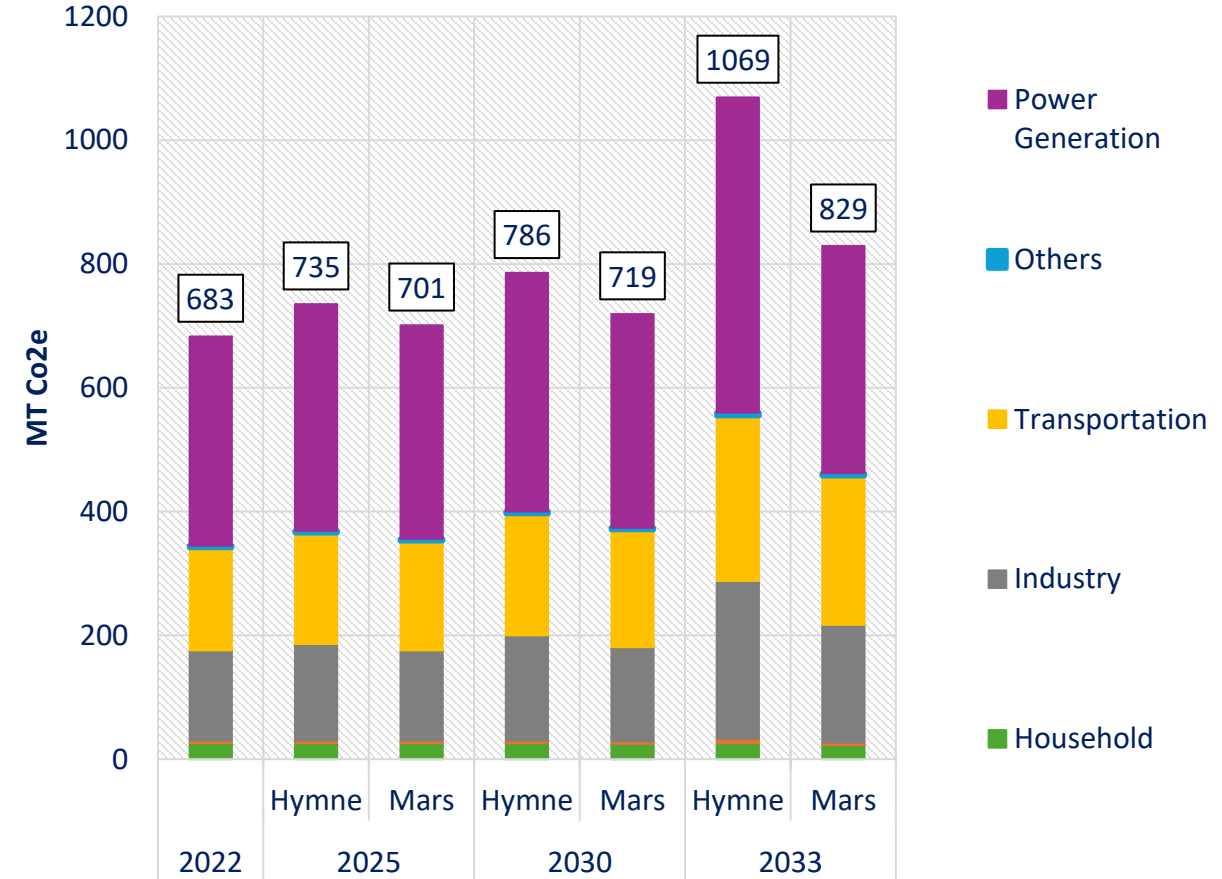
Directorate General of NREEC @2024

# Outlook of Energy Demand and Supply (2)

## Outlook Electricity Production by Energy Source



## Outlook GHG Emission



Source:

- MEMR, Indonesia Energy Outlook (2023);
- MoEF, GHG and MPV Inventory Report (2023);



# Current Energy Policy and Measurements

## Energy Policy



Ratification on Paris Agreement that GHG emission reduction target 31.89% BaU and 43.2% with international support in 2030 (Updated of Enhanced NDC)



National Energy Policy have a target renewable energy mix share 23% in 2025 and 31% in 2050, respectively



Net zero emission target in 2060 or sooner through low carbon technology implementation

## Measurements

1. Government Regulation No. 14 of 2012 on business activities for providing electricity.
2. Government Regulation No. 33 of 2023 on energy conservation.
3. President Regulation No. 112 of 2022 on accelerating the development of renewable energy for providing electric power.
4. MEMR Regulation No. 1 of 2023 on provision of electric charging infrastructure for electric motorized vehicles battery based.
5. MEMR Regulation No. 02 of 2024 on rooftop solar PV connected to the electric power network holders of business permits for providing electricity for public use.



Cirata floating solar PV 192 MWp, West Java



# Major Challenges and bottlenecks



**Harmonization among the institutions**



**Geographical condition**



**Market structure (single off-taker)**



**Highly energy subsidize**

# Expectation from Energy Policy Course



## Area of Interest

- Energy transition initiatives, particularly the emphasis on incentive-based strategies and the promotion of investments in clean technologies;
- Best practices on decarbonization technology (hydrogen, CCUS, energy storage system);
- Energy modelling;



## Expectation

- Enhanced understanding of energy policy frameworks;
- Enhanced analytical skill on evaluating policy impacts particularly on renewable energy adoption;
- Advanced skill on addressing challenges on renewable energy integration and energy access;

# Thank You

[www.esdm.go.id](http://www.esdm.go.id)

 Kementerian Energi dan  
Sumber Daya Mineral

 @KementerianESDM

 @kesdm

 KementerianESDM



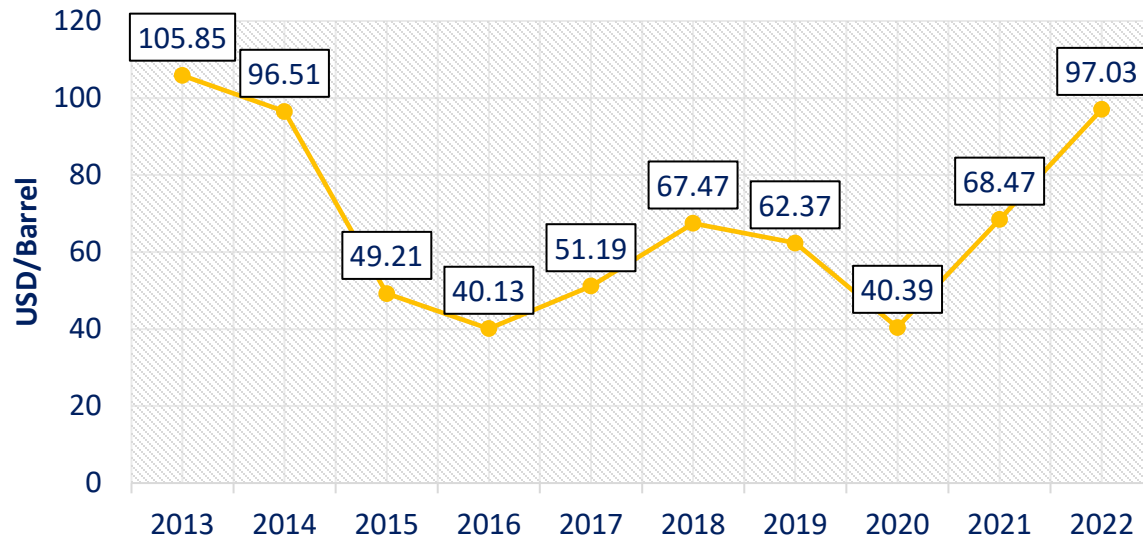
## Address

Jl. Pegangsaan Timur No.1,  
Cikini, Menteng Jakarta

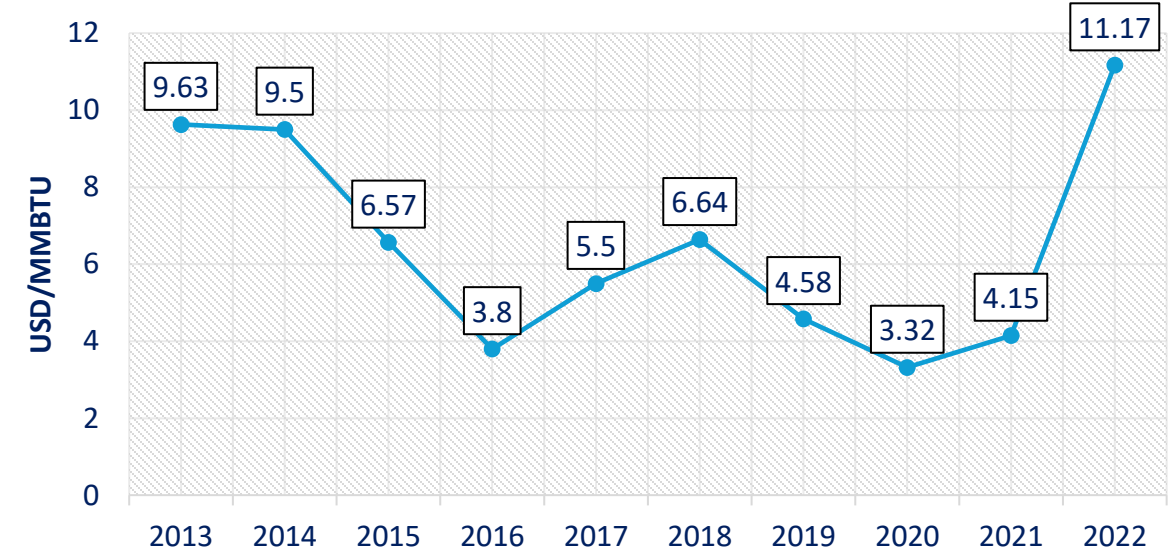


# Appendix – Indonesia Energy Prices

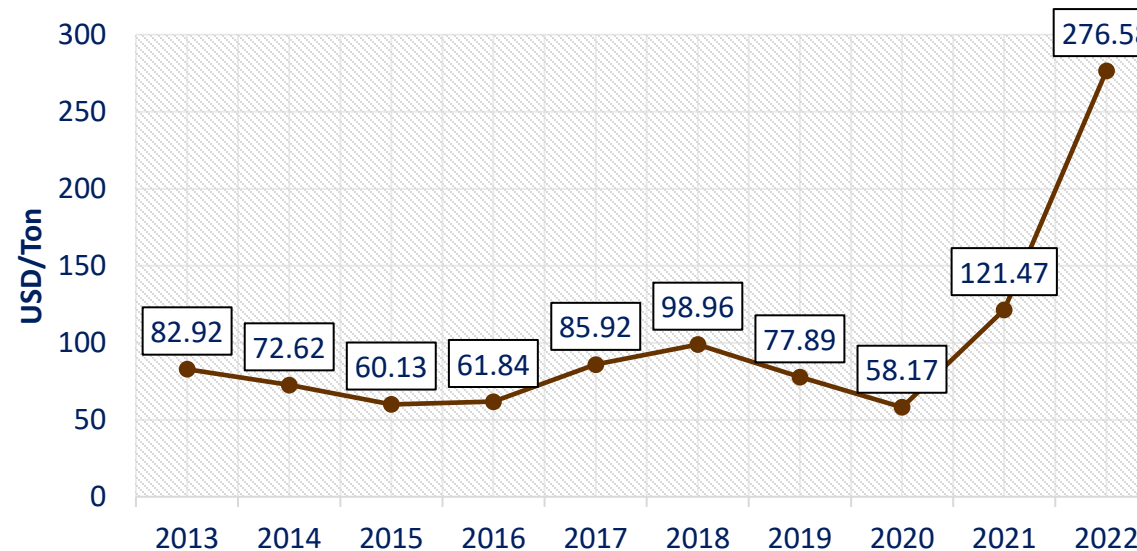
## Crude Oil Price



## LNG Price



## Coal Price



Source: MEMR, Handbook of Energy & Economic Statistic of Indonesia (2022)