

## Excel Dashboard

### Electricity Generation Analysis

Column Names : Region , Country , ISO Code , RE or Non-RE , Main Technology , Technologies , Year , Electricity Capacity (MW) , Electricity Generation (GWh)

#### Introduction :

The Electricity Generation Analysis Dashboard provides a comprehensive overview of the data of Electricity generation per year by country or Region and focusing on various factors contributing to Electricity generation . The dataset encompasses attributes related to the factors and technologies related to Electricity generation.

#### Key Insights :

1. Total Electricity Generation (GWh):
  - This metric represents the total amount of electricity generated across all regions and years.
2. Renewable Energy vs. Non-Renewable Energy Split:
  - Calculate the electricity generated from renewable and non-renewable sources.
3. Average Electricity Generation per Year (GWh/year):
  - Calculate the average annual electricity generation to understand the trend over time.
4. Total Electricity Capacity (MW):
  - The total installed capacity for generating electricity across all regions and years.

## Visualizations:

- 1) Electricity Generation Over Years:
  - Visualize the Total Electricity Generated and trend of electricity generation over the years.
- 2) Total Electricity Generation by Region:
  - Compare the total electricity generation for different regions using a bar chart.
- 3) Electricity Generation by Technology:
  - Total Electricity Generation by Each Technology in different Regions and Countries.
- 4) Electricity Generation vs. Capacity:
  - Comparison of electricity generation and capacity for each country
- 5) RE vs. Non-RE Distribution:
  - distribution of electricity generation between renewable and non-renewable sources.
- 6) Average Electric Generation By Technology:
  - Average Electric Generation By each Technology in different regions and countries.
- 7) Electricity Capacity :
  - Total Electricity Capacity Used by the Resources in different regions.

## Conclusion:

The analysis of electricity generation data reveals a consistent upward trend in generation over the years. Regional wise Renewable and Non Renewable resources used and the Capacity Used to generate the electricity by country .