# EU Energy Generation vs. Consumption

#### **Key Points:**

- Comparison of energy practices
- Focus on EU nations: Sweden, Germany and Poland
- Diverse economic, sociopolitical, and religious factors
- 8-year data analysis
- Utilizing public data from ENTSO-E

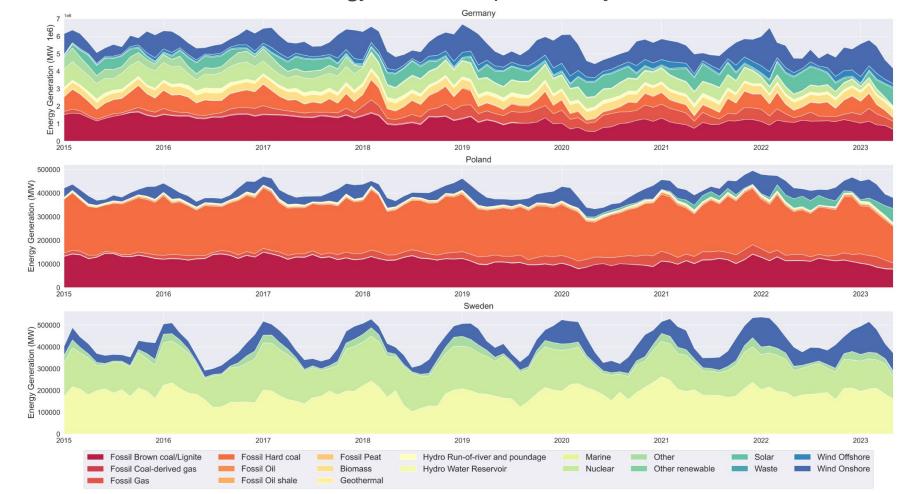


#### Data Snapshot

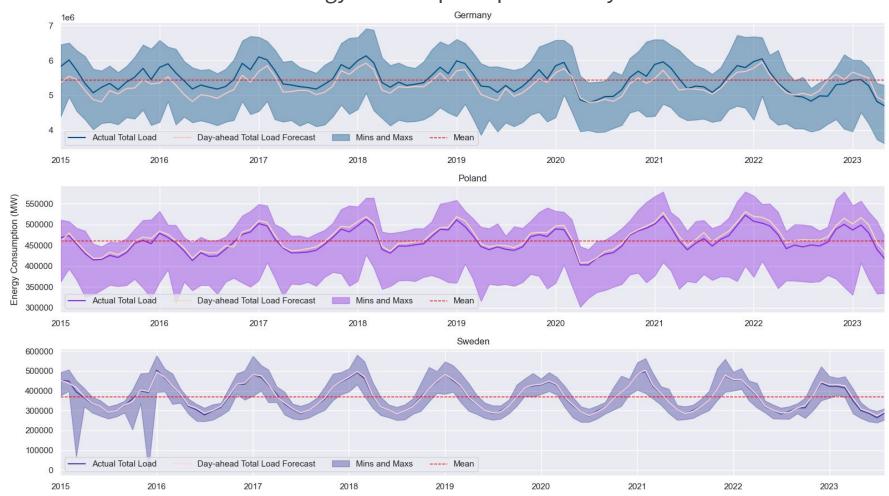
- Scope: dataset contains energy generation and consumption data for Germany, Poland, and Sweden.
- Time Range: data spans from January 2015 to mid-2023, providing a comprehensive view of eight years.
- Energy Generation: covers various energy sources vital for sustainability assessment.
- Energy Consumption: includes actual and predicted consumption values, allowing for real-world usage analysis.



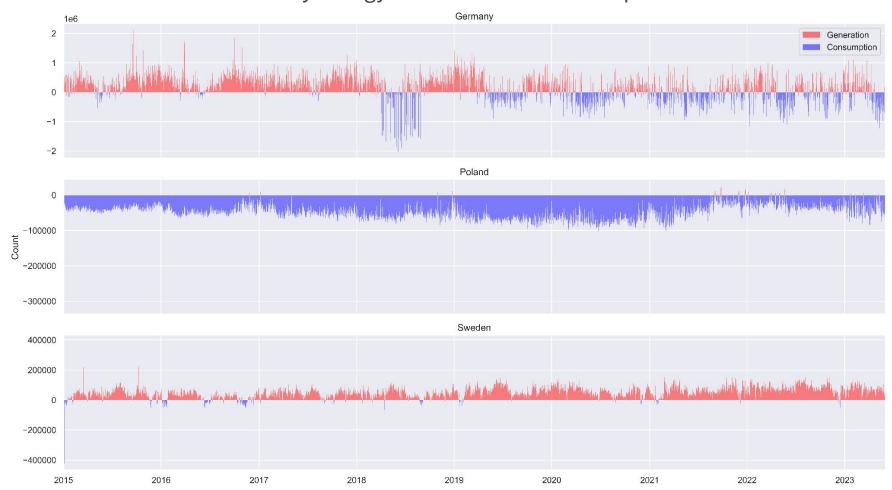
## **Energy Generation per Country**



## **Energy Consumption per Country**



## Daily Energy Generation vs. Consumption



### Main Findings:

- **Sweden:** dominated by nuclear and renewables.
- **Poland:** transitioning from fossil fuels, imports energy.
- **Germany:** balanced fossil and renewables, high volume (~7M MW).
- **Consumption:** seasonal with spikes (Sweden in 2019 and in 2015).
- **Generation vs. Consumption:** surplus (Sweden, Germany), deficit (Poland).

#### Main Challenges:

- Large-Scale **Data Scraping**.
- Efficient Time-Series Data Visualization.