**Data Set**

**Data set link: https://www.kaggle.com/code/marianadeem755/forecasting-electricity-by-hour-rnn-vs-lstm**

* This is an hourly time-series electricity consumption and production dataset.
* It includes the hourly consumption and production, and the production is split into one of the categories: nuclear, wind, hydroelectric, oil and gas, coal, solar, and biomass.
* It's a big data set of more than 5 years!
* All values of this dataset are in MWs.
* This Dataset can be used to analyze various trends and patterns such as Seasonal Variations, Renewable Energy Contributions, and Fossil Fuel Dependence.
* The dataset can be used to drive innovation in energy technologies, such as the development of more efficient storage systems.
* As this is a more than 5-year dataset this data can be used to conduct detailed statistical analysis, forecast future trends, and develop models for optimizing electricity production and its consumption.

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| **Column** | **Description** |
| Timestamp | The date and hour of the recording (e.g., YYYY-MM-DD HH:00). |
| Consumption (MW) | The total electricity consumption in megawatts (MW) during that hour. |
| Total Production (MW) | The total electricity production in megawatts (MW) during that hour. |
| Nuclear (MW) | Electricity produced from nuclear power plants. |
| Wind (MW) | Electricity produced from wind turbines. |
| Hydroelectric (MW) | Electricity produced from hydroelectric power plants. |
| Oil and Gas (MW) | Electricity produced from oil and gas power plants. |
| Coal (MW) | Electricity produced from coal power plants. |
| Solar (MW) | Electricity produced from solar panels. |
| Biomass (MW) | Electricity produced from biomass energy sources. |