

Plugging into the Future

An Exploration of Electricity Consumption Patterns Using Tableau

1. Big Idea Directions

- Global trends in electricity consumption over time
- Sector-based analysis (Residential, Industrial, Commercial)
- Sustainability & renewable energy impact
- Economic connections (GDP vs electricity use)
- Forecasting future electricity demand

2. Strong Problem Statements

- How is global electricity consumption evolving and what does it mean for sustainable energy planning?
- What factors most strongly influence electricity demand growth?
- Can historical consumption patterns help predict future energy crises?
- Is electricity consumption growth aligned with renewable expansion?

3. Interesting Analytical Angles

- Temperature vs electricity demand
- Urbanization rate vs consumption growth
- GDP vs electricity use per capita
- Population growth vs total demand
- Energy efficiency improvements over time

4. Dataset Ideas

- World Bank electricity consumption data

- International Energy Agency (IEA) datasets
- UN urbanization data
- World Bank GDP data
- CO₂ emissions datasets
- Kaggle global energy datasets

5. Dashboard Structure

- Global Overview Dashboard (Map + Time Trend)
- Sector Analysis Dashboard
- Sustainability Insights Dashboard
- Forecasting & Future Trends Dashboard

6. Unique & Creative Angles

- Energy Inequality Index
- Power Divide – Developed vs Developing
- Smart Cities & Electricity Demand
- EV adoption impact on electricity consumption
- Battery storage & peak demand analysis

7. Key Questions to Guide Analysis

- Where is electricity demand accelerating fastest?
- Is consumption efficiency improving?
- Which countries may face supply shortages?
- How does electricity use relate to climate targets?
- Is demand growth sustainable?

8. Catchy Presentation Titles

- Watts the Future?
- Powering Tomorrow
- The Energy Pulse

- Grid Intelligence
- The Power Shift