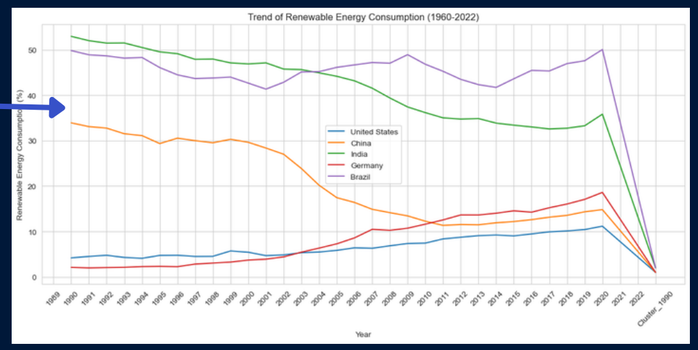
Evolving Trends in Global Renewable Energy Consumption: A Comparative Analysis (2000-2020)

The story outlines the evolution of renewable energy from the 1990s, starting with skepticism and gradual adoption. By the 2000s, increased climate change awareness and technological advancements led to diverse global approaches and significant progress in regions like Africa Western and Central. The current landscape shows varied progress with ongoing efforts to overcome challenges. The future of renewable energy is seen in terms of new technologies, policy evolution, and international cooperation.

Time Series Plot 1960-2022



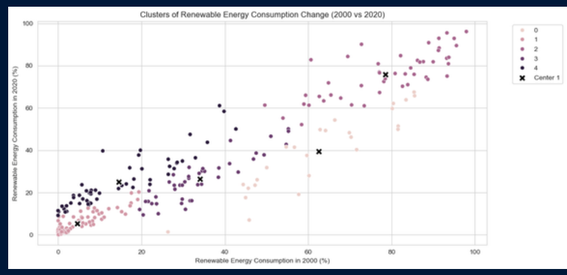
China and India rapidly grow in renewable energy, Germany steadily advances, while the U.S. slowly increases and Brazil maintains a high baseline due to hydropower.

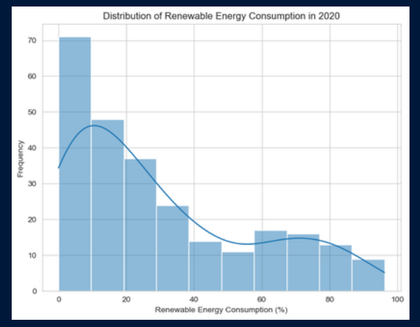
Evolution over time

Histogram (2020) Distribution of Consumption

Distribution among countries

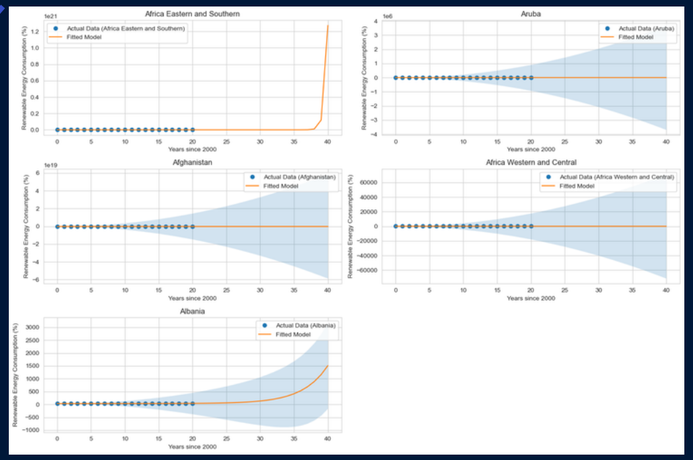
Boxplot (2020) Comparative Consumption





Most countries have low renewable energy consumption, highlighting global potential for improvement, yet showing a diverse approach with some nations far ahead.

Country Comparison



Africa Eastern and Southern are forecasted to experience a significant increase after 35 years from 2000, following a long period of stagnation. Aruba shows a stable, low renewable energy consumption with no predicted changes. Afghanistan's consumption remains at zero with no upward trend, while Albania's actual data suggests moderate consumption with a predicted gradual increase over time.

Heatmap 2013-2022

Temporal Comparison

Scatter Plot 2010 vs 2020

Grouping Patterns

Cluster Plot Consumption Patterns

a global shift towards sustainable energy, with countries progressing at different rates, underscoring the diverse challenges and opportunities in achieving a renewable future.