

# TITLE: NAVIGATING THE GLOBAL TRANSITION TO RENEWABLE ENERGY: A GEOGRAPHICAL INSIGHT

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<https://github.com/HamzaQureshi12/Applied-Data-Science-Assignment-3>



## Background and Introduction:

The shift towards renewable energy is a critical component in the global response to climate change. Understanding how different countries are adopting renewable energy sources provides insights into global progress towards more sustainable energy practices. This analysis visualizes the worldwide consumption of renewable energy, highlighting the disparities and progress in different regions.

## Methodology:

Data on renewable energy consumption (as a percentage of total final energy consumption) for each country in 2021 was sourced from the World Bank. This information was then integrated with a global map using geospatial analysis techniques, enabling a visual representation of renewable energy consumption by country.



## Results:

The world map visualization illustrates the varying levels of renewable energy adoption across nations. Some countries exhibit high percentages of renewable energy consumption, indicating strong commitments to sustainable energy practices. In contrast, others show lower levels, possibly due to economic, technological, or policy-related challenges. The map provides a clear visual representation of global leaders and laggards in the transition to renewable energy.

## Recommended Next Steps:

Further investigations could focus on the factors driving high renewable energy consumption in certain countries, including government policies, technological advancements, and public-private partnerships. Additionally, understanding the barriers faced by countries with low renewable energy consumption could inform strategies to accelerate their transition. Future analyses could also explore the correlation between renewable energy adoption and its impacts on CO2 emissions and other environmental indicators.

