



Renewable Energy Usage

Insights from data on renewable energy generations

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INTRODUCTION

- Renewable energy plays a key role in India's energy future.
- The analysis covers state-wise energy generation, yearly trends, and contributions from various renewable energy sources (solar, wind, hydro).
- The data used is focused on Renewable Energy across India, examining electricity generation in TWh.



State-wise Renewable Energy Generation

- A Bar Chart illustrates renewable energy generation by state.
- States like Tamil Nadu, Gujarat, and Rajasthan are major contributors to renewable energy in India.
- The chart visualizes the total renewable electricity generation across states in terms of TWh and by type (Solar, Wind, Hydropower)



Yearly Trends in Renewable Energy Generation

Line Chart shows the yearly growth or fall in renewable energy usage in India.

Significant increase in renewable energy generation over the years, particularly in Solar energy.

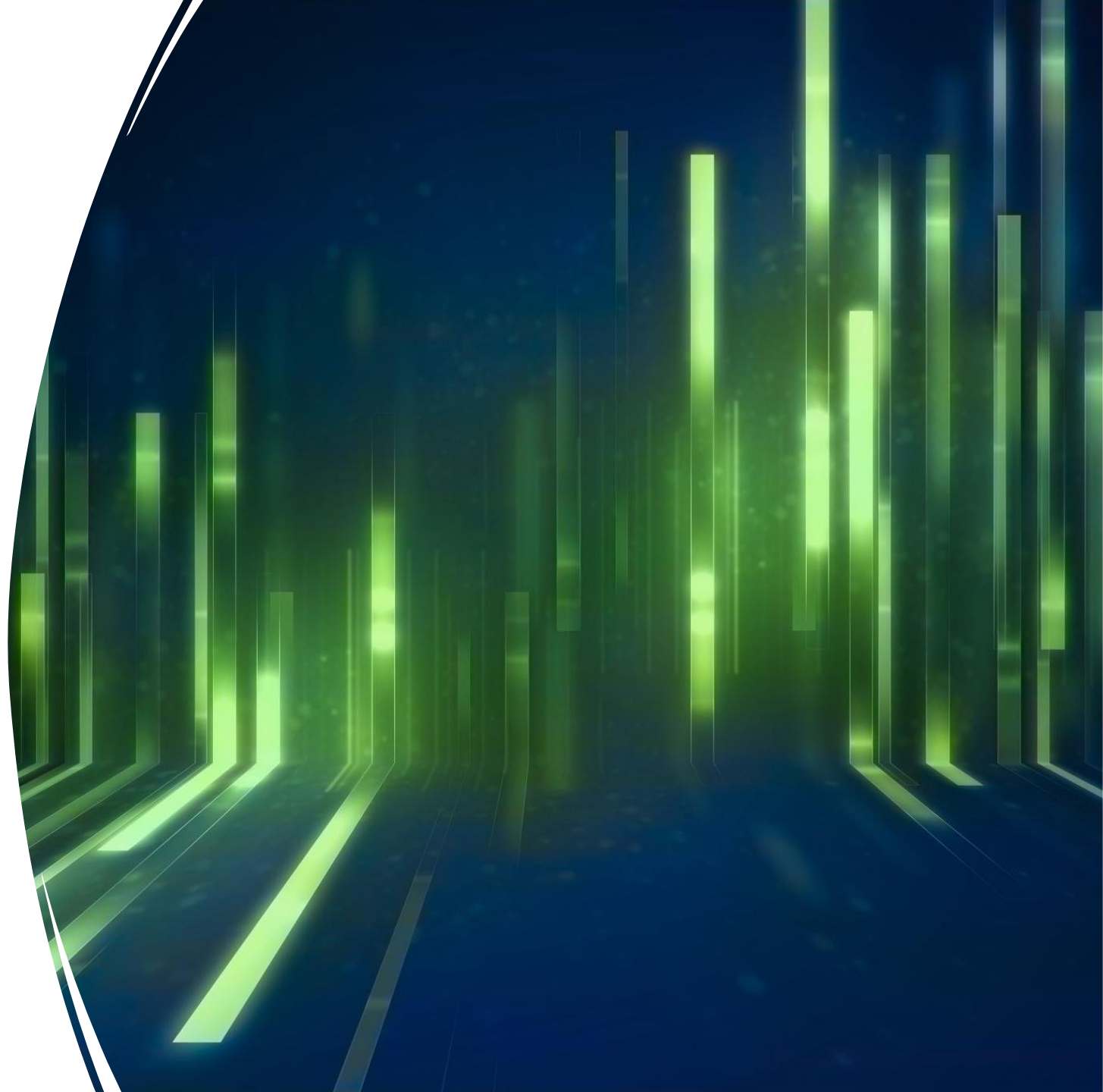
The data highlights the rising adoption and investments in renewable energy sources.



State Contribution to Renewable Energy Generation

The stacked bar chart reveals the contribution of each state to renewable energy generation, broken down by energy type (solar, wind, hydropower).

- Tamil Nadu, Gujarat, and Rajasthan contribute significantly to solar and wind energy generation.
- States with lower contributions need to focus on strengthening renewable energy infrastructure and policies.



Insights and Key Takeaways

- Solar Energy is the fastest-growing renewable energy sector, driven by policy support and technological advancements.
- Wind Energy is growing but at a slower pace compared to solar, with high potential in coastal regions like Tamil Nadu and Gujarat.
- Top States: Tamil Nadu, Gujarat, and Rajasthan are leading the way in renewable energy adoption.
- Growth Potential: States like Maharashtra and Uttar Pradesh can further boost their renewable energy contributions with focused investments and supportive policies.



Conclusion

- Renewable energy usage in India is rising steadily, with solar energy being the key driver.
- Solar and Wind energies are expected to play a crucial role in India's energy transition towards a more sustainable future.
 - State-Level Focus: States with strong renewable energy infrastructure are seeing higher energy generation, while others have room for improvement.
- India is on the path to achieving its renewable energy targets with further growth in solar and wind power.

