Global CO_2 Emissions and the shift towards **Renewable Energy**

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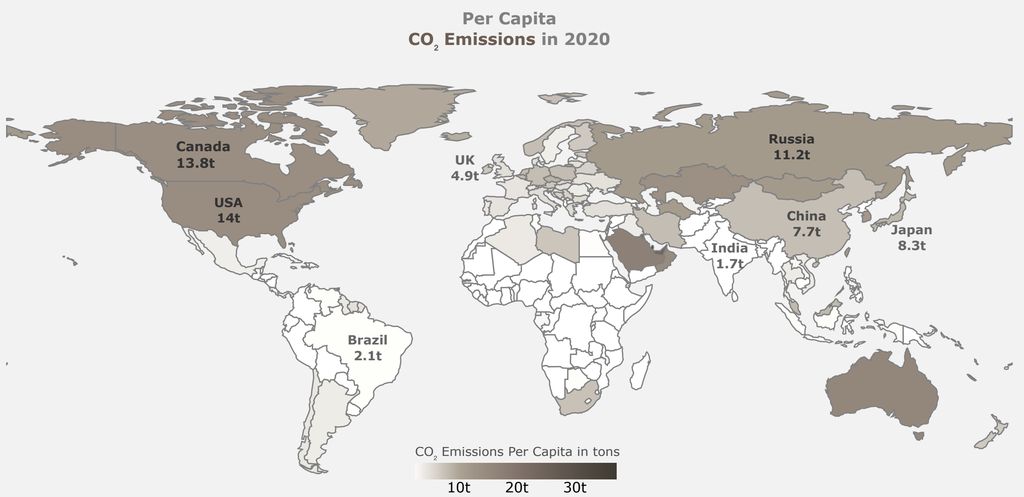
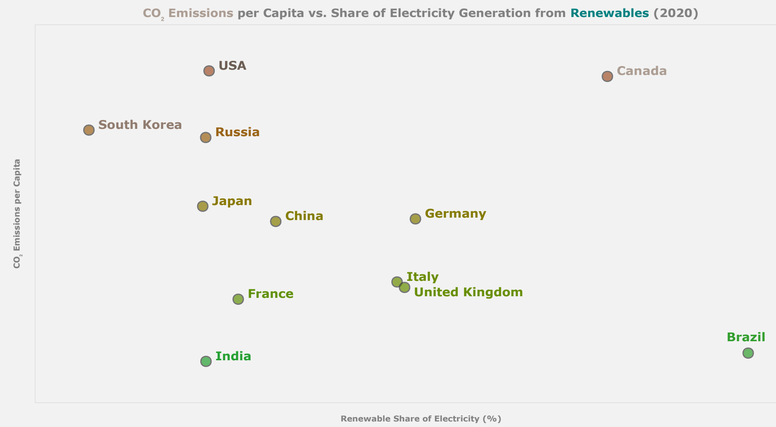
The Global Landscape of CO_2 Emissions

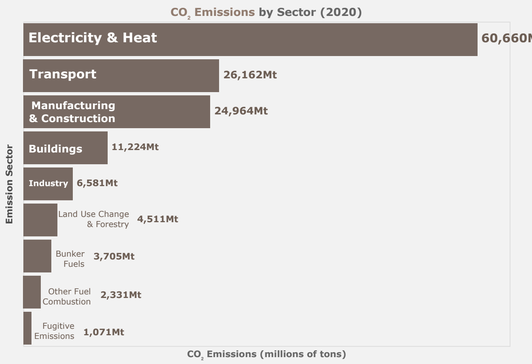
In 2020, global CO_2 emissions reached alarming levels, primarily driven by key sectors such as **electricity and heat**, which accounted for a staggering **60,660 million tons**. Following closely are transportation and manufacturing & construction, with emissions of 26,162 million tons and 24,964 million tons, respectively.

The accompanying world map of CO_2 emissions per capita underscores significant disparities among countries, with **Canada, the United States, and Russia** exhibiting notably high levels of pollution per person. Among the world's major economies, the United States stands out with the highest CO_2 emissions and GDP per capita, highlighting the substantial environmental impact of its economic activities. In contrast, Brazil and India are among the countries with the lowest CO_2 emissions per capita, reflecting their different stages of economic development and emphasizing the need for targeted policies to address emissions while considering economic growth.

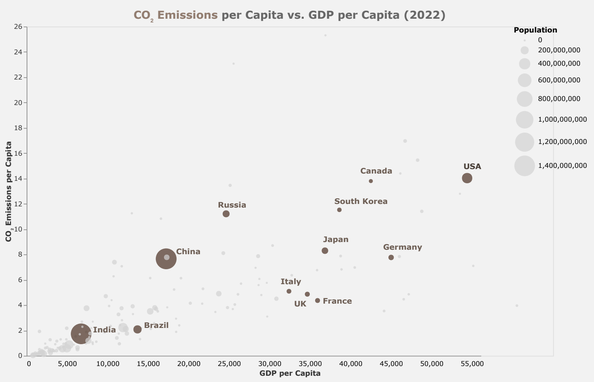
The analysis of emissions by fuel type reveals a troubling trend: **coal, oil, and gas have seen consistent growth over time**, remaining the top contributors to global CO_2 emissions. These insights collectively highlight the urgent need for effective policies that not only aim to reduce emissions but also promote the adoption of renewable energy globally.

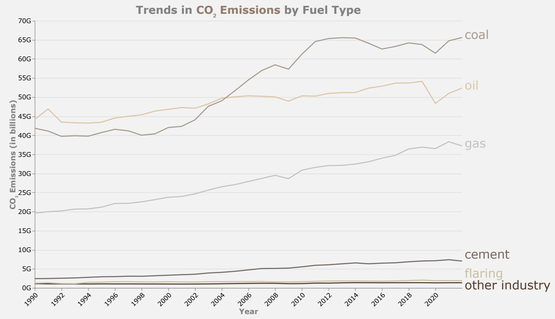


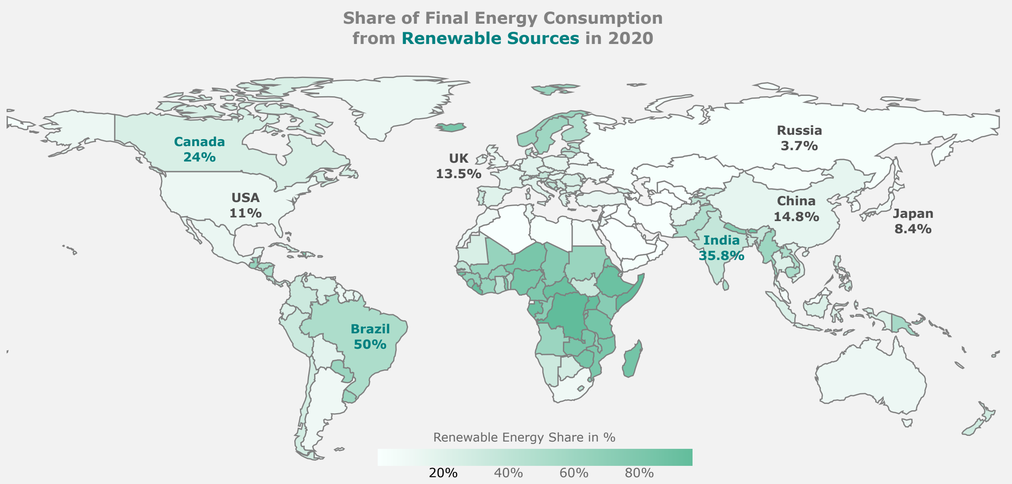


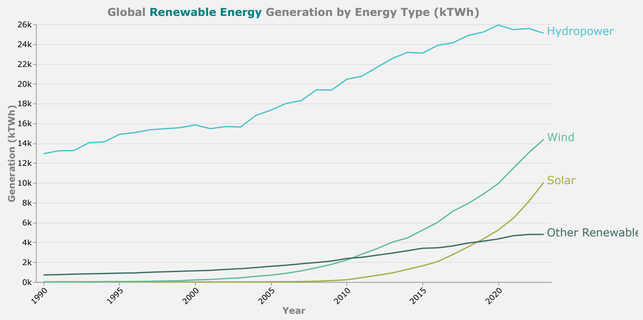


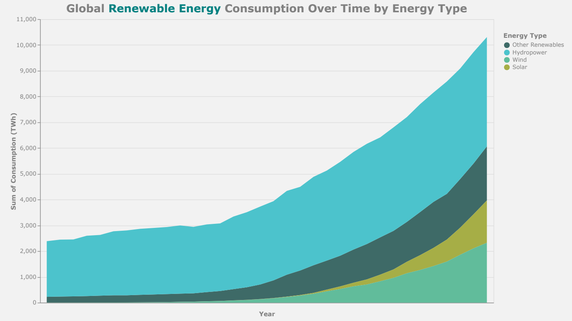
As nations continue to invest in and expand their renewable energy capabilities, it is crucial to foster policies that support sustainable practices while balancing economic growth. The path to a greener future relies on leveraging these renewable resources to create a cleaner, more sustainable world for generations to come.











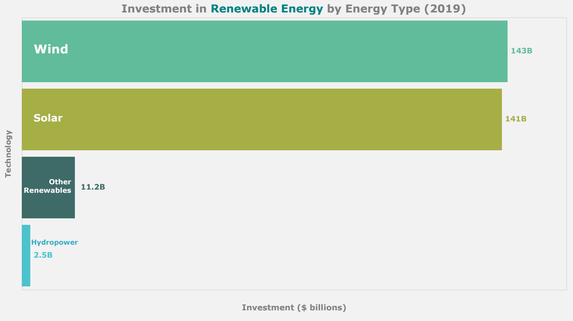
Leveraging renewable energies: A way forward

In recent years, the global shift towards renewable energy sources has become increasingly vital in the fight against climate change. Among the major economies, **Brazil** stands out with an impressive **50%** of its energy coming from renewable sources, closely followed by **India** at **35.8%** and Canada at 24%. This significant reliance on renewables demonstrates a commitment to sustainable development and environmental responsibility.

The generation of renewable energy has seen a steady increase over time, with **hydropower leading** the way as the largest source of renewable electricity, followed closely by **wind energy**. This growth reflects a broader trend towards cleaner energy production and a gradual decline in dependence on fossil fuels.

In terms of consumption, **hydropower** remains the highest source of renewable energy. This consumption pattern highlights the importance of diverse energy portfolios in meeting national energy needs.

Investment in renewable energy is also on the rise, with **wind energy ($143B)** attracting the highest level of investment, followed by **solar energy ($141B)**. This trend signifies a growing recognition of the economic and environmental benefits of transitioning to renewable energy sources.



Information source: Our World in Data