The Global Landscape of CO, Emissions

In 2020, global CO₂ 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 CO₂ 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 CO₂ 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, 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 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.

60,660Mt

CO, Emissions by Sector (2020)

26,162Mt

24,964Mt

Electricity & Heat

6,581Mt

Bunker 3,705Mt

11,224Mt

and Use Change & Forestry **4,511Mt**

Transport

Manufacturing & Construction

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.



Information source: Our World in Data

Canada 24%



Global CO, Emissions and the shift towards Renewable Energy



Per Capita CO, Emissions in 2020



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.



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.

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.

		Investment in Renewable Energy by Energy Type (2019)	
Technology	Wind		143B
	Solar		141B
	Other Renewables 11.2B		
	Hydropower 2.5B		
	-	Investment (\$ billions)	