# Canadian Wildfires in 2023 Release Record-Breaking Levels of CO2, Exceeding India's Emissions



In 2023, Canadian wildfires, fueled by climate change, released a massive amount of carbon dioxide into the atmosphere, surpassing India's annual fossil fuel emissions. Scientists from the World Resources Institute and the University of Maryland reported that these wildfires emitted 3.28 billion tons (2.98 billion metric tons) of CO2. The fires burned a forest area of 29,951 square miles (77,574 square kilometers), six times the usual average from 2001 to 2022, and accounted for 27% of global tree cover loss last year.

The resulting carbon emissions were equivalent to those from 647 million cars or nearly four times the annual emissions from all airplanes. James MacCarthy, the study's lead author, emphasized that burning forests release vast amounts of stored carbon back into the atmosphere, contributing significantly to climate change. Recovery of this carbon through regrowth would take decades, underscoring the lasting impact of these wildfires.

The fires notably affected air quality, impacting cities far from the fire itself, such as New York City. Health concerns arose as over 200 communities, comprising around 232,000 residents, were evacuated due to the fires. The extreme temperatures in Canada, recorded as up to 18 degrees Fahrenheit (10 degrees Celsius) above average, contributed to the increased severity of the fire season.

Experts like Mike Flannigan from Thompson Rivers University and Jacob Bendix from Syracuse University highlighted the role of climate change in exacerbating the frequency and intensity of wildfires. The 2023 wildfires are seen as an indicator of potential future trends, suggesting that catastrophic fire seasons may become more common.