

A Review on Global Warming

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Abstract: *One of the most important environmental issues of our time is global warming, which is primarily caused by human activity. In order to provide a thorough examination of the phenomenon, this review paper will cover its fundamental causes, observed and anticipated effects on the Earth's climate and ecosystems, as well as proposed mitigating measures. The atmospheric emission of greenhouse gases, particularly carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), is the main cause of global warming. The remarkable rise in greenhouse gas concentrations during the past century has been mostly attributed to the burning of fossil fuels, deforestation, industrial operations, and agricultural activities. The effects of global warming are numerous and extensive. Increasing temperatures have sped up the melting of glaciers and polar ice caps, which has raised sea levels and increased the likelihood of coastal flooding. Extreme weather occurrences, such as heatwaves, droughts, and violent storms, have increased in frequency and have a negative effect on agriculture, water supplies, and vulnerable communities. Additionally, as ecosystems experience extraordinary shifts in temperature and precipitation patterns, biodiversity loss and ecosystem disruption are being seen. This paper presents a variety of potential mitigation tactics that could be used to alleviate the problems caused by global warming. Among these include switching to renewable energy sources, improving energy efficiency, putting reforestation and afforestation programmes into action, and applying sustainable agriculture methods. Additionally, international collaboration and policy frameworks are essential for promoting group initiatives. With significant effects on the environment and society, global warming continues to be a top priority. On a local, national, and international level, cooperation is required to address this complicated issue. This review emphasises how crucial it is to comprehend the underlying causes, effects, and mitigation strategies in order to effectively combat global warming and build a sustainable future for future generations.*

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