

Global Warming -2020 : Global warming: The causes and impacts.

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Abstract :

Global warming occurs when incoming ultra violet solar radiation from the sun strikes the earth and is absorbed by the atmosphere, earth's surface and water bodies. Much of it is then reflected back into the atmosphere as infrared radiation, keeping the earth habitable. For earth's temperatures to remain stable these two should be in equilibrium. However, they are not, due to the emission of green-house gases by anthropogenic activities, that result in the green-house effect (because a similar process occurs in a green-house, high energy UV radiation penetrates the glass walls of a green-house, but weaker IR cannot pass through the glass, the trapped IR keeps the greenhouse warm even in the coldest winter weather). This has resulted in the increase in the average temperatures of the earth's surface and oceans. Long term heating of the earths' climate system has been observed since the pre-industrial period between 1850 and 1900, the earth's average global temperature has risen by about 1degree Celsius and is increasing by 0,2 degrees Celsius per decade due to human activities primarily fossil fuel burning and deforestation which increase the concentration of heat trapping green-house gases in the atmosphere. The Intergovernmental Panel on Climate Change (IPCC) affirms that of the increase of global temperatures is attributed to anthropogenic activities mainly the burning of fossil fuels and deforestation. Global warming is caused by both human and natural activities, which include volcanic eruptions and solar activity.

Note: This work is partly presenting at 9 th International Summit on Global Warming and Environmental Science Aug10-11,2020.