



A Brief Review on Global Warming and Climate Change: Consequences and Mitigation Strategies

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ABSTRACT

This review article will offer compelling evidence that global climate change caused by global warming is already underway and is need of our immediate attention. Convincing evidence that the Earth's climate is undergoing significant and alarming, changes has accumulated rapidly in recent years, especially during the past three decades. The conclusion that there is substantial warming of the Earth's surface is not based primarily on theoretical models, although these models do succeed in replicating the existing database with growing success. Instead, global warming is a fact confirmed by an enormous body of observations from many different sources. Indeed, the focus of research has now shifted from attempts to establish the existence of global warming to efforts to determine its causes. Although the exact extent of damage from global warming may be difficult to predict now, it can be said with confidence that the harmful effects of global warming on climate will significantly outweigh the possible benefits. The probability is extremely high that human generated greenhouse gases, with carbon dioxide the major offender, are the primary cause of well documented global warming and climate change today. Much can be done now to mitigate the effects of global warming and the associated climate change. Difficulties in addressing the problem are not caused primarily by unavailable technology, but by the lack of sufficient incentives to implement the new technologies more aggressively.

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