Book Review

Title : **Global Warming**

Author : **Shasta Gaughen**

Publisher : **Greenhaven Press, Thomson Gale, 2005**

Book Reviewer : **Nadia Astriani***

Global Warming is a part of Greenhaven's Contemporary Issues Companion series published by Thomson Gale in 2005. Each volume of the anthology series focuses on a topic of current interest, presenting informative and thought-provoking selection written from wide-variety of viewpoints. It is an ideal launching point for a research on environmental topic. Each anthology in the series is composed of readings taken from an extensive gamut of resources including periodical, newspapers, books, government documents, and publications by private and public organization in internet websites. Readers will find factual support suitable to be used in reports, debate, speeches, and research papers.

The book will also be beneficial for students who take the environmental law subject in understanding the latest environmental issues. Global warming has become the most discussed issue in Environmental Law for decades. Discussing the issue of global warming is not an easy task for law students. The students need to have sufficient scientific based data. This book provides some sort of scientific basis, therefore this is a perfect book for student to start learning global warming issues. In order to give a comprehensive understanding to the readers, the book is divided into three parts: Understanding Global Warming, The Consequences of Global Warming, and Solving the Global Warming Problem. Each chapter contains around 6-7 articles.

In the first chapter “Understanding Global Warming”, Constanza Villalba, through her article “Researchers Investigate the Global Warming Phenomenon,” discusses the different techniques that climate researchers use to find the 'why' and 'how' of earth's climate change. Villalba explains that climatologists can find evidence of various climate patterns over time by measuring differences in growth patterns of trees, accumulations of chemical substances in coral, or layers of lake sediment. She concludes by noting that while climate researchers are investigating both natural and man-made effects on the climate, most of the researchers agree that human activity is partly responsible for global warming. Glenn Hodges, in the article “Global Warming Research in the Arctic,” describes his trip in a submarine on

PADJADJARAN Jurnal Ilmu Hukum Volume 2 Nomor 1 Tahun 2015 [ISSN 2460-1543] [e-ISSN 2442-9325]

* Lecturer at Environmental, Spatial and Agrarian Law Departement Fakultas Hukum Universitas Padjadjaran, S.H. (Universitas Padjadjaran), M.Si. (Universitas Padjadjaran).

the Arctic with researchers trying to answer why the Arctic warms up and what implication it has on earth's climate. He notes that the Arctic is such a complex environment that it is difficult for researchers to determinate whether these changes are related to global warming at all. Nevertheless, climatologists and other researchers are gathering plenty of data to help them answer their questions about climate change, with hope to determine if the warming of the Arctic may lead to catastrophic global climate change or if it is simply a natural part of an age-old cycle.

Robert T. Watson, on his Article "Scientific Evidence for Global Warming," states that there is a strong scientific evidence that human activities are contributing to global climate change. He maintains that researchers have verified significant increases in the earth's temperature during the twentieth century. He asserts that complex global climate models show that human activities indeed have a profound impact on the warning text. According to Watson, unless human production of greenhouse gases is sharply curtailed, global warming will result in a dramatic change in the world environment.

Elizabeth Royte, in her article "Scientific Skepticism about Global Warming," discusses the work of atmospheric science professor John Christy-one among few researchers who, in addition to arguing that humans do not cause global warming, doubts that the earth is warming at all. The data collected by Christy indicates that the earth's atmospheric temperatures is cooler than expected, which he believes is due to natural causes and will not result in significant climate changes.

The article "Global Warming Results from Natural Causes" is written by James Glassman, after interviewing Sallie Baliunas, an astrophysicist from Harvard-Smithsonian Center for Astrophysics, on the cause of global warming. Baliunas asserts that recent increases in the earth's temperature are linked to the natural changes in the energy output of the sun. Because the temperature of the earth has fluctuated throughout history, the current warming trends should not be hastily assumed to be caused by human activities. According to Baliunas, the scientific models of climate change have failed to take into account all the potential variables, which has led to inaccurate emphasis on the role of industrial pollutants. Meanwhile, according to Katharine Mieszkowski in the article "The Influence of Fringe Science on Global Warming Policy," the fringe science espoused by those who refute the existence of global warming is occurring. Mieszkowski asserts that a handful of scientists backed by the energy industry have been claiming that the phenomenon does not exist. These naysayers have been able to create a false perception that no scientific consensus on global warming has been reached, creating public uncertainty about the potential threat of climate change.

Mark LaRochelle's article, "Media Misrepresentation of Global Warming Studies," explains that journalists often misinterpret or misreport the result of scientific research concerning global warming. Numerous magazines and

newspapers state that these studies have reached the conclusion that global warming is real, getting worse, and due largely to human activity. In fact, the IPCC and the NRC both warn that the finding of the studies are tentative, need careful interpretation, and should not be oversimplified by the media.

The second chapter "The Consequences of Global Warming", starts with Mark Lynas's "The Worldwide Effects of Global Warming" where he describes his three years journey observing climate change. Lynas asserts that signs of global warming are dramatically surfacing all over the planet and already having a direct effect on people's lives. Lynas believes that these changes are only the beginning. If nothing was done to stop global warming, the earth will experience unimaginable climate catastrophes. Gabrielle Walker's article, "Global Warming's Impact on Weather Patterns," explains that global warming may be affecting weather patterns worldwide. Scientist have noticed that the occurrence of catastrophic weather events like storms and floods seem to be increasing in frequency and intensity. They are investigating whether global warming is contributing to this phenomenon. In addition, Walker notes sea levels rising caused by the increasement of global temperatures may wreak more havoc on weather patterns in the future.

Bruce Agnew's articles, "The Potential Effect of Global Warming on Human Health," explores how global warming may impact the world's health. According to the author, most scientists participating in recent climatological studies agree that global warming will affect the world's ecosystems and weather patterns. These climatic changes are likely to have detrimental effects on human health. Charles W. Petit in the article "Global Warming in the Antarctic," reports that while the Antarctic is still one of the coldest places in the world, it gets warmer more rapidly than the rest of the planet. Moreover, he states, this warming trend has already produced dramatic effects: Icebergs are shrinking, glaciers are receding, and the immense Larsen Ice Shelf is quickly collapsing into the ocean. Researchers have also discovered alarming fluctuations in wildlife populations that they believe are due to global warming. Although scientists are still unsure what the long-term effects of the changing conditions in the Antarctic will be, they have little doubt that global warming is responsible.

Gordon Laird examines the effects of rising global temperatures on Artic communities in the article "The Impact of Global Warming on Arctic Communities." Laird reports that the cold season begins later and ends sooner in the Arctic, which has created problems as minor as delaying the ice hockey season and as profound as homelessness. He explains that global warming is especially threatening to the Inuit, the native people of the Arctic region. Many Inuit still rely on hunting for survival, but warmer-than-usual temperatures have drastically shortened the hunting season and have adversely affected the wildlife habitats. As seal and other animal have grown scarce, a number of hunters have become impoverished or even homeless.

Global warming threatens to destroy the cultural heritage and traditions of the people of the Arctic. Piers Moore Ede, on the article "Sinking Islands in the Pacific," reports that rising sea levels are endangering the tiny Pacific Island nation of Tuvalu. According to the author, the people of Tuvalu have pleaded in vain to the world leaders to try to reverse the global warming trend, which they believe could save their home. As ocean waters threatened to engulf the island, the people of Tuvalu were forced to begin relocating to New Zealand in 2002. Tuvalu's plight raises serious questions about how the people of these tiny islands can be compensated for the loss of their entire culture and way of life. Tuvalu is not the only island nation at risk. According to scientific reports, more islands will disappear beneath the wave as global warming continues to produce worldwide climate change.

The third chapter "Solving the Global Warming Problem" starts with Worldwatch Institute Research Associate-Seth Dunn assessing the effectiveness of international policies designed to curtail climate change. Many country, both industrialized and developing, are implementing various policies intended to reduce greenhouse gas emissions. However, he argues, it is crucial for the international community to coordinate these efforts and develop a consistent worldwide action plan to curb global warming. According to the author, some industrialized nations, particularly large greenhouse gas emitters like the United States, Canada and Australia, have resisted taking a leadership role, making it difficult to foster international cooperation in the implementation of effective global warming policies. The world must achieve a consensus on global warming policy, if the threat of catastrophic climate change aimed to be reversed.

Patrick J. Michaels, in the article "A Global Warming Solution is Not Necessary," argues that there is no need to spend time and money in attempting to stop global warming. Warming is occurring, but not on the scale the media and environmental organizations would like people to believe. In reviewing studies on the impact of global warming, Michaels finds that climate change resulting from warmer temperatures is not likely to have significant impact on the environment or human health and welfare. The author believes that spending time and resources on solution to global warming is unnecessary and ultimately will drain money away from solving more serious environmental problems. In the following article, "Carbon Dioxide Emissions Must Be Reduced Worldwide," first published on The Economist, a weekly British magazine focusing on international news and current events, the authors suggest that the long term strategy for solving global warming must include a drastic reduction in the levels of carbon dioxide emissions. According to the authors, while all fossil fuels contribute to the level of carbon dioxide in the atmosphere, the primary problem is coal, which are consumed primarily by poor countries to fulfill much of their energy need. They maintain, wealthier nations should help coal-reliant countries in the transition to a low-carbon energy system. If

carbon reduction plan starts slowly, with international support and strong emphasis on research into alternative sources of energy, the progress toward stabilizing greenhouse gases can be made.

Vanessa Baird, in her article "The Use of Fossil Fuels Should Be Curtailed", states that the use of fossil fuels such as oil, gas, and coal increases the amount of carbon dioxide in the earth's atmosphere, which many scientists believe is a major cause of global warming. She asserts that in order to stop global warming, the world must overcome its addiction to fossil fuels. Baird acknowledges that this solution will not be easy to implement, since four-fifths of the world's energy currently comes from fossil-based fuels. However, she argues, the switch to renewable sources of energy would be much simpler if the wealthy, industrialized nations have not been resisting the transition. In the end, those living in poor and underdeveloped countries will suffer the most if the world continues its dependence on fossil-based energy sources.

A retired journalist, Ross Gelbspan in his article "A Proposal for International Funding of Energy Alternatives" addresses the need to develop new sources of energy in order to reduce greenhouse gases and curb global warming. Gelbspan notes that several nations and major industrial companies have already begun to implement policies to improve fossil-fuel efficiency, but he argues that ultimately these measures will not be enough to reduce carbon emissions. Instead, it is essential to increase the use of renewable energy sources, such as solar power, that does not contribute to the greenhouse effect. Gelbspan proposes establishing a global fund for researching and implementing fossil-fuel alternatives, with the money coming from existing energy subsidies and a modest tax on international currency transactions.

The book ends with "Contraction and Convergence: A New Plan to Stop Global Warming," an article based on Aubrey Meyer, a professional violinist and the director of Global Common Institute in London, interviewed by Fred Pearce. Meyer's plan calls for reducing yearly global emissions to 0.4 tons of carbon per person. Unlike some other proposals, Meyer's formula takes into account the fact that large industrialized nations produce far more carbon emissions per person than the most developing nations. Under this plan, countries with high rates of carbon production such as the United States will have to dramatically decrease emissions, whereas other countries such as India will already be below the target level of emissions. According to Meyer, the "contraction and convergence" formula represents a fair and balanced solution to the global warming problem.