## Renewable Energy and Public Health: A Balanced Perspective

Public health considerations are often overlooked in discussions around renewable energy sources. Although renewable energy is widely accepted for its sustainability and an overall better alternative to non-renewable energy, this research aims to highlight the underexplored health impacts of renewable energy sources, offering a balanced perspective. While renewable energy sources such as wind and solar provide substantial health benefits by reducing pollution related risks, as noted by the Healthy Energy Initiative (2015), they are not actually the "best" source of sustainable energy choice. They also contribute to generating major pollutants around the world, for example, wind energy may contribute to noise pollution, and solar panel manufacturing often involves hazardous materials. Such effects highlight the need to assess renewable energy's health impacts regionally, given the variability in soil and ecosystem responses.

In order to address this problem, we need to understand and identify the difference between sustainable and renewable. True sustainability is hard to achieve in a technologically advancing society, however knowing the implications of your actions can lead to a better understanding in identifying controls. The study combines a review of existing literature with new data analysis to assess the health implications of biomass energy in comparison to other renewable sources. It examines issues like soil nutrient depletion, carbon emissions, and health impacts from pollutant release during combustion, providing a broader understanding of renewable versus sustainable energy practices. The work of Gohlke et al. (2008) emphasizes the need for regulations to protect public health from the long-term effects of fossil fuel combustion, while simultaneously advancing renewable and nuclear technologies. Overall, this research suggests that effective policy adjustments can help mitigate health risks associated with renewable energy technologies. Shifting toward sustainable energy policy is vital for safeguarding both environmental and public health. As we are approaching the tipping points of all our major biomes, this distinction can help revolutionize sustainability practices around the World.

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