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What should we do about Climate Change?

Governments, organizations, corporations, and individuals need to put forth extreme efforts to mitigate inevitable loss and damage from climate change. Previous efforts have failed societies on the promise of reduced emissions, preparedness plans, and financial contributions. Moving forward, I propose a stringent approach that begins with simultaneously relating climate mitigation to health co-benefits and instituting an emissions allocation focused on equalizing emissions. With these strict policies in place, our research into carbon and solar geoengineering can then be financially funded and supported.

Climate change is currently thought of as a politically divisive topic, based on scientific evidence to some and fantasies to others. We must shift this divisive thinking from opposition to communal concern for climate change's affect on human health. By improving our climate, we concurrently improve health through cleaner air, more opportunities for physical activity, and more nutritious foods.[1] One article documented health-related costs in the US from extreme weather events in 2012 equated to approximately $10 billion dollars at the 2018 rate.[2] If health was clearly defined as being related to climate, lobbyists would be able to convince decision-makers to invest in immediately rigorous climate mitigation policies. Pairing health co-benefits to climate mitigation leads to dedicating climate investments in research, finances, and policies.

With support for climate investments, political leaders now have a greater inclination for climate politics. Carbon budgets and emissions allocations are examples of these policies that require enforcement due to previous failures in emission limits. Many reviews suggest that countries are falling short on their Nationally Determined Contributions (NDCs) due to vast implementation gaps.[3] Without an international governing body issuing sanctions, countries will continue to miss their NDCs and reduce climate change to the 2° C threshold by 2050. The equalize emissions approach of an emissions limit for all countries combined with international regulation will ensure countries abide by these limits. Countries are likely to set their own emission limits per industry to meet these national requirements, further reducing global emissions. The rigor of equalizing emissions with regulatory discipline leads to immediate action that is necessary to meet the global 2050 emissions goals.

The funds generated from equalized emissions penalties should be invested in all geoengineering. In 2019, the US government allocated a minimal $4 million dollars to the National Oceanic and Atmospheric Administration to increase their research on Earth's radiation budget.[4] This scratches the surface for geoengineering, being more investigative instead of developing sufficient solutions. Financial awards need to shift towards more efficient carbon engineering practices that have high confidence in carbon sequestration and solar geoengineering solutions with low impacts on earth's closed system. Both carbon and solar geoengineering will inevitably have externalities, but by modeling technologies after nature with enough funding, further developments ensure that these externalities will become negligible. Geoengineering is a viable solution to climate change due to our dependence on a capitalistic, carbon economy.

Informing global leaders on health co-benefits from climate mitigation will influence immediate action towards emission standards. With these standards coupled with sanctions, these funds can be dedicated towards improved development of geoengineering techniques. We need to take these actions since so little has been done in the past without globally rigorous programs. To prevent drastic morbidity and mortality and permanent damage, we should do everything in our power to reduce the impacts of climate change for humans and the world.

References

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